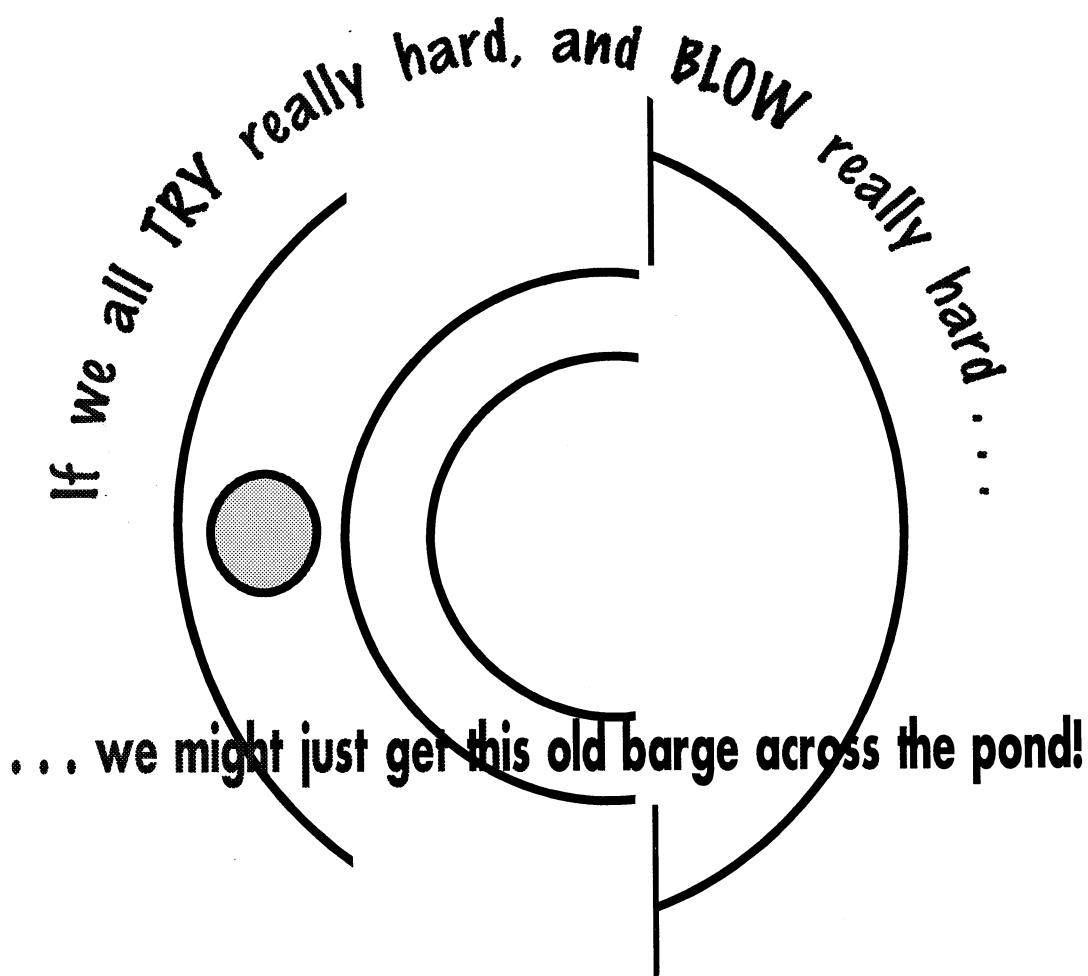


# CURRENT

# NOTES

*Volume No. 16  
Issue No. 4  
July/Aug 1996  
\$4.95 US  
\$6.50 Canada*



# Pro Audio Tools - Buy Direct!

C-LAB - SoundPool - Steinberg - Line Audio Designs & more!

## C-LAB FALCON

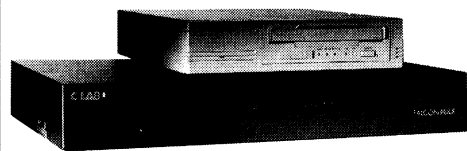
The NEW  
Falcon MK X!

as low as...  
\$1799 Cdn or \$1299 US!



### MK X, The EXpandable Falcon!

Designed to complement the inherent software adaptability of the Falcon with the ability to integrate the interfaces and peripherals necessary for different musical applications and individual working setups. The MK X is housed in an attractive and sturdy new case design with room for a built in digital interface, SPDIF or ADAT standards as well as fixed or removable drives such as SyQuest or Iomega Jazz, accelerators and expanded memory.



C-LAB MK-I's start at...  
\$109999 Cdn. \$76999 US

C-LAB MK-II's with 530 Mb Internal SCSI drives start at...  
\$189999 Cdn. \$132999 US

C-LAB MK-X's with 1.2 Gb Internal SCSI drives start at...  
\$189999 Cdn. \$79999 US

Yamaha CD Recorders start at...  
\$89999 Cdn. \$62999 US

**Pay Nothing for 6 Months!**  
**No Money Down**  
**No Interest**  
**No Payments for 6 Months!**

\*C-LAB On Approval of Credit. Offer is for Canadian Residents Only.  
†GST required on all orders paid here.

## LINE Audio Design



### Jam by Line Audio Designs External High Quality A/D & D/A Converters!

The highest quality external D/A and A/D converters available for the Falcon. Totally flat frequency response from 10Hz - 22KHz with low - noise and high - resolution, high - quality 18-bit converters with 128 x's oversampling, the Jam series are also the lowest priced solution available!

Jam OUT 8, balanced outputs!  
\$54999 Cdn. \$38499 US

Jam IN 8, record 8 channels!  
\$64999 Cdn. \$45499 US

Jam 8 Pro 19" Rack /w Jam OUT 8  
\$64999 Cdn. \$45499 US

Jam 8 Pro w/ Jam OUT and Jam IN  
\$119999 Cdn. \$83999 US

## Steinberg

### CUBASE audio 16 +

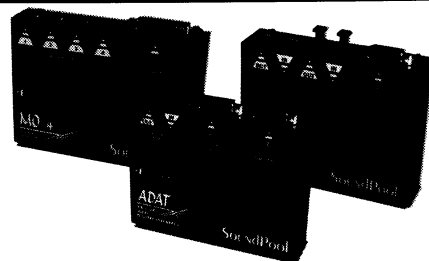
Cubase Audio Falcon 16 +  
\$84999 Cdn. \$59499 US

Bundled with any C-LAB Falcon  
\$64999 Cdn. \$45499 US

Cubase Score Atari  
\$59999 Cdn. \$41999 US

Cubase Light Atari  
\$13999 Cdn. \$9999 US

## SoundPool



### SoundPool Interfaces ...

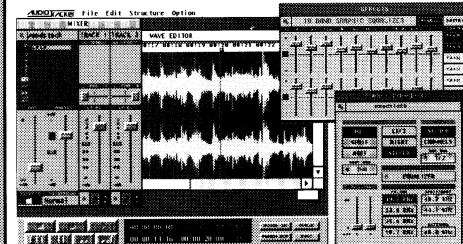
SoundPool SPDIF, Digital Interface...  
\$39999 Cdn. \$27999 US

SoundPool ADAT Interface...  
\$99999 Cdn. \$69999 US

SoundPool Sample Rate Converter...  
\$56999 Cdn. \$39899 US

SoundPool MO4, 4 extra MIDI Outs!...  
\$28499 Cdn. \$19999 US

SoundPool Sync Box, MTC - SMPTE/EBU LTC...  
\$32999 Cdn. \$22999 US



SoundPool AudioTracker, 8 Track D2D S/W...  
\$34999 Cdn. \$24499 US

SoundPool WaveMaster, the best Wave Editor!  
\$29999 Cdn. \$20999 US

SoundPool AudioTracker + WaveMaster!  
\$49999 Cdn. \$39999 US

SoundPool AudioMaster, Mastering System...  
\$55999 Cdn. \$34999 US

SoundPool AudioMaster Plug In Modules.  
Multi Dynamics Processor, FFT Analyzer, 6 band Parametric  
Equalizer and MIDI Sync modules start at...  
\$23999 Cdn. \$16799 US

CD Recorder Software, burn yer own CD's!  
\$28999 Cdn. \$19999 US



# Toll Free Orders! 1-800-547-9203

We Ship FREE! to Canada and the USA on all Software Orders over \$100.00 Cdn.!

Visit us on the Internet! <http://www.compdirect.com> [info@compdirect.com](mailto:info@compdirect.com)

CDN. = Canadian Dollars, US = US Dollars. US is for comparative purposes, actual transactions are in CDN. funds



# Buy Direct - New TT Clones!

*The Fastest Atari TT Compatibles ever from Computer Direct!*



## The Need for Speed?

DirecT40 and DirecT60 are here and these new Atari TT030 Compatibles will satisfy even the most demanding need for speed! Highly TT030 compatible and designed for processor intensive tasks such as Desktop Publishing, Image Editing, Ray Tracing, Rendering and Database Management as well as high speed word processing, DirecT40 and DirecT60 will increase your productivity!

## Just How Fast is it?

DirecT60 is based on the 120 MIPS MC68060-60MHz processor providing 30x's the speed and power of a Falcon030! The lower priced DirecT40 is based on the 29 MIPS MC68040 32/64 MHz processor offering 15x's the processing power of a Falcon030! As an example, a Rendering task that takes 4 hours on a Falcon030 will be finished in mere minutes on a DirecT60! Get more done in less time!

## How easy is it to expand?

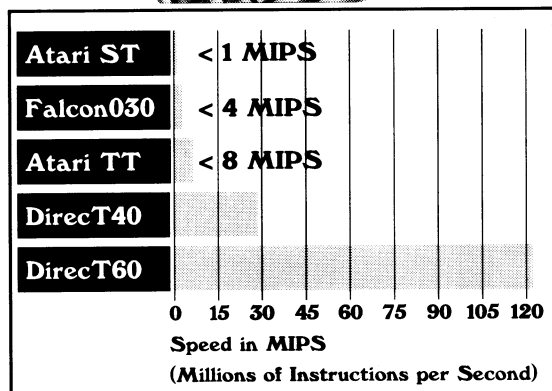
DirecT40 and DirecT60 are designed to use PC / IBM compatible peripherals such as ISA or PCI Graphics Cards, EIDE and SCSI hard drives, keyboards and standard PS/2 memory SIMMS! Memory is expandable to 1 Gigabyte via simple plug in standard SIMM memory modules! Built in Canada by the company that brought you the DirecT30 compatible, you can be assured of receiving top quality product, service and support!

## How about Compatibility?

DirecT Atari compatibles have always been known for their high degree of compatibility! DirecT40 and DirecT60 follow this path of higher speed with excellent compatibility. Generally, if it runs on a TT030 it will run on a DirecT40 or DirecT60. Our use of a special version of TOS 3.06 (TT030 TOS) maintains a high degree of backwards compatibility. Cleanly written GEM applications run smoothly and faster than ever! Extensive testing with Calamus SL, Digital Arts products, Atari Works and more have proven these new machines to be highly useable!

## Technical Specifications:

Mainboard; Choice of MC68040 32/64MHz CPU, MC68060 50MHz CPU or MC68060 60MHz CPU. Min. 4MB RAM expandable to 1GB using 72 pin SIMMS, TOS 3.06M OS in ROM. Data Storage; DD and HD Floppy, 850 Mb EIDE hard drive. Video; 1Mb DRAM SVGA expandable to 4Mb VRAM using either PCI or ISA bus graphics cards. Expansion Slots; 4-PCI bus slots, 2-ISA bus slots, 1-VME bus slot. SCSI-2 bus for up to 7 SCSI devices, 1-EIDE slot for up to 2 EIDE hard drives (Master/Slave). External Ports; BiDirectional Parallel Port, AT Keyboard, Modem 1, Modem 2, LAN, MIDI In, MIDI Out, SCSI 50 pin Centronics. Case; Mid Size Tower Case with 250 Watt Power Supply, CSA / UL Approved. Optional Full Size Tower Case.



**Pay Nothing for 6 Months!**  
**No Money Down**  
**No Interest**  
**No Payments for 6 Months!**

\*O.A.C. On Approved Credit. Offer valid for Canadian Residents Only.  
GST is payable at time of purchase.

## Complete Systems

Complete DirecT40 and DirecT60 systems include 4Mb RAM, 850Mb EIDE hard drive, DD, HD Floppy Drive, 1 Mb DRAM Graphics card with NVDI 4, AT Style Keyboard and are installed in a Mid-Size CSA/UL Approved Tower Case! Also includes DirecT Tools, a special suite of software. Options can include larger hard drives, CD ROMS, more memory, removeable drives and more!

All DirecT computers are built to order allowing for custom packages, call us for your personalized quote today!

### DirecT40

Complete Systems

start as low as ...

**\$ 3399.99 Cdn.**

**\$ 2379.99 US**

### DirecT60

Complete Systems

start as low as ...

**\$ 3799.99 Cdn.**

**\$ 2689.99 US**

# Computer Direct

10338-59 Avenue, Edmonton, Alberta, Canada. T6H 1E6

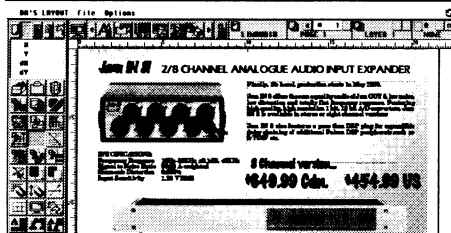
Info & Support: (403) 496-2488 24 Hour Fax Line: (403) 496-2489



# Direct Productivity Tools!

## New Graphics, DTP, Word Pro & Data Management Tools!

### DIGITAL ARTS



DA's layout TC, This is the Ultimate Desktop Publishing System available for any platform! **New! v6!**

This much power and ease of use is unparalleled! Designed with a unique Traditional Pasteboard / Light Table interface, Layout is intuitive, fast and easy to learn. Layout, like all DA's products, uses a modular GEM interface with plug ins readily available. Use Calamus, Didot or even Postscript fonts! Set fonts on any path in real time, extrude and set a light source, fill with colour blends or any Bitmap Image! Autotrace any Bitmap into a vector! As well, a complete vector editing tool box is included! In fact, just about anything you can imagine can be created and edited from within Layout! Output is a snap too! Adobe Postscript level 2 is fully supported for easy high res output at any service bureau!

\$ 99999 Cdn. \$ 69999 US

DA's Picture, an incredible expandible 24-bit colour image retouching and editing package!

As easy to use as a paint program, yet it is a full scale image processing system. An intuitive GEM interface with all the modern concepts such as Drag and Drop! Runs in any colour resolution on all Atari and Atari Compatible computers. Graphics cards are supported! DA's Picture can be expanded using external plug in modules allowing it to grow with you!

\$ 24999 Cdn. \$ 17499 US

Look II, for Epson Flatbed Scanner

Epson scanners are well known for their quality and durability and Look II allows you to access all the features of these award winning scanners.

\$ 19999 Cdn. \$ 13999 US

### Scanners

Computer Direct is your best source for image acquiring hardware and software.

We have the largest selection of Atari Compatible flatbed scanners and drivers available in North America! Choose from Epson, HP, Mustek and Relsys. Scanners with Atari software drivers start as low as...

\$ 59999 Cdn. \$ 39999 US

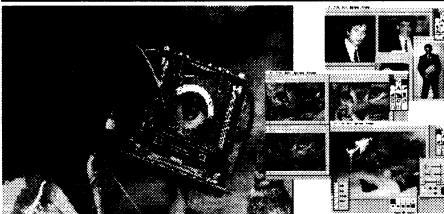
### PhotoLine



PhotoLine is a new high end Image Editing and processing system with powerful tools, filters and colour correction capabilities that rival packages costing three times as much on other platforms!

\$ 27999 Cdn. \$ 19999 US

### Positive Image



Positively Perfect! Positive Image!

A high end Photographic Image Processing and Retouching System that is enhanced to take advantage of the DSP in the Falcon, yet will run on any Atari computer!

Positive Image is fully GEM compliant and allows the editing of 24 bit colour images on an ordinary ST in any resolution! Positive Image sports a modern 3D interface, extensive file format support, filters and user definable 256 level masks, multitasks, support for SpeedoGDOS or NVDI scalable vector fonts. A high spec system is not required, but the program will take advantage of the increased processing power if it is there!

\$ 13999 Cdn. \$ 9999 US

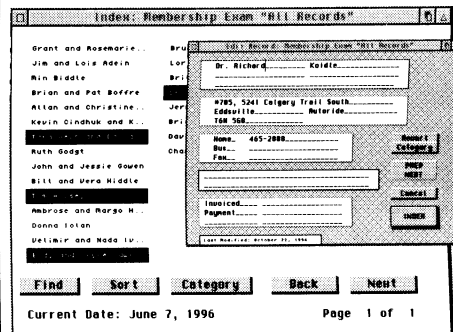
### Fonty Editor

The Best Calamus Font Editor ever! Convert Postscript Type 1 to Calamus CFN Easily!

Fonty is a must have tool for any Desktop Publisher! Easily and accurately converts Postscript Fonts to Calamus Vector Fonts, create your own fonts from scratch or from any Degas Mono Picture! Create a font for your signature and sign your creations! Edit and manipulate existing fonts, create true Italic and Bold Fonts in a simple point and click environment!

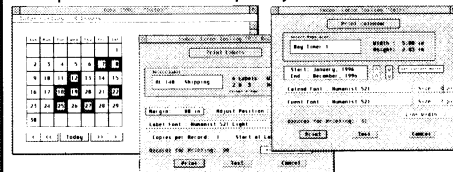
\$ 3999 Cdn. \$ 2999 US

### In Touch



An amazing Personal Information Manager for all Atari Computers!

Organize and manage all of your personal information with this powerful and simple to use database. In Touch uses Speedo Fonts to print a wide variety of professional looking labels, address books, date books, calendars and TO DO Lists. All Avery labels are supported with point and click simplicity!



Organize your time with the included event manager, you can even print out refill sheets for any popular "DayRunner" or "DayTimer" pocket diary! A date reminder keeps you informed of upcoming meetings or events.

In Touch imports and Exports a wide variety of database formats for sharing data with other programs. It supports the Clipboard, Drag and Drop under MagiC and XACC as well as VA Protocol. Can run as a DA as well!

\$ 7999 Cdn. \$ 5999 US

### Texel

The NEW MS Excel and Lotus 1,2,3 Compatible Spreadsheet for Atari Computers!

A new and powerful spreadsheet with the ability to import and export both MS Excel and Lotus 1,2,3 files! Extensive support for SpeedoGDOS or NVDI Vector Font engines allows you to include colour in your spreadsheets. Full Formula support, multitasking, iconification and modern 3D interface makes this new spreadsheet a pleasure to use and a must have for business or office.

Call for Pricing!

# Toll Free Orders! 1-800-547-9203

We Ship FREE! to Canada and the USA on all Software Orders over \$100.00 Cdn.!

Visit us on the Internet! <http://www.compdirect.com> [info@compdirect.com](mailto:info@compdirect.com)

CDN. = Canadian Dollars, US = US Dollars. US is for comparative purposes, actual transactions are in CDN. funds

# Utility Tools - Buy Direct!

*Our Most Desirable Enhancements and Utilities for your Atari*

## MagiC 4

It's like buying an accelerator and getting multitasking thrown in for free!

MagiC 4 is an incredibly fast and true 32-bit preemptive multitasking operating system that replaces TOS with a noticeable performance increase.

Run multiple applications simultaneously with quick switching between them. Programs are executed faster than under TOS and all system functions have been optimized for speed. The new and modern MAGXDESK is included!

\$ 13999 Cdn. \$ 9999 US

## MagiC Mac

Run Atari Software on any 68030, 68040 or PPC Macintosh at speeds previously only dreamed about!

MagiC Mac is MagiC written for Macintosh computers. Highly compatible and fast, MagiC Mac allows you to run most of your favourite Atari applications side by side with Macintosh programs.

Cut and paste text between applications running on both OS' using the Mac clipboard and the Atari clipboard. Share files simply by dragging and dropping. Connect an Atari formatted SCSI hard drive to the Mac for access to the files on it!

MagiC Mac includes Ease, the highly regarded alternate desktop. Managing your desktop will never be easier!

\$ 31999 Cdn. \$ 21999 US

## Face Value

An Awesome new utility for GFA Basic Programmers!

The most important development tool ever released for GFA Basic. Drop a RSC File in, out pops the most amazing GFA code you ever saw!

*Creates the new GEM2 code for GFA in a fraction of the time!*

\$ 9999 Cdn. \$ 6999 US

## Ease 4

Ease does as Ease says! A feature filled replacement desktop for use with or without MagiC.

Ease is an alternative desktop designed for multitasking operating systems such as MagiC or Geneva. It can also be used with TOS. Any file or folder or program can be dragged onto the desktop and opened from there. Programs can be started via hotkeys. TOS programs can run in a window with the ability to save or print the output! GDOS fonts can be used to display text in windows. The display mode, text or icons can be set for each window!

\$ 9999 Cdn. \$ 6999 US

## OutSide 3.4

Break the memory limit! Outside, the Virtual Memory Manager for all 68030 based Atari computers.

Adding RAM to your Falcon, TT or PAK 68/3 equipped Atari can be expensive. With Outside a partition on your hard drive is used to "Swap" data with little or no noticeable loss of performance. Outside is the fastest Virtual Memory Manager available. It is highly configurable, rock solid and very compatible.

No hardware modifications are needed! Outside is a complete software solution!

Outside ships with HD Driver Lite, an extremely powerful and fast AHDI compatible hard disk driver.

Upgrades from Previous versions are available.

\$ 7999 Cdn. \$ 5999 US

## Kobold

The amazingly fast file utility!

Copy, move and delete files in record time! Automate repetitive tasks using recordable macros! Back up and optimize hard disks, format floppies and more. Kobold runs in the background under MagiC and HD Driver!

\$ 6999 Cdn. \$ 4999 US

## HD Driver 5

Give your drive a swift boot!

HD Driver is the fastest hard drive utilities available for Atari computers! Extensive support for the widest range of hard drives, SCSI bus arbitration, parity support for data integrity on a TT or Falcon, support for XHDI partitioning formats, special support for ZIP drives with read write protection as well as password protection. Background DMA transfer support under MagiC 4. New to version 5 is the ability to format hard drives! Share a drive with other computers, even Macs or PC's!

\$ 5999 Cdn. \$ 3999 US

## NVDI 4

NVDI ... even the name sounds fast!

Tired of waiting for screen redraws? Then NVDI is for you! NVDI replaces Atari's portion of TOS referred to as the VDI with super fast, optimized code. Windows will pop open faster, scrolling of windows will be smoother and faster and now NVDI features even faster printing routines!

Yet NVDI offers so much more than screen acceleration. The new font engine is fully compatible with SpeedoGDOS applications and contains many new printer drivers incl. the popular Epson Stylus colour page printer.

A special version is available for ET4000 graphic cards as well as for MagiC Mac.

*Computer Direct offers upgrades from v3.x as well as v2.x, call fax or e-mail us for details!*

\$ 11999 Cdn. \$ 8999 US

## E-Copy

The New Disk Copy Utility

An incredible new disk copy utility that runs in the background under MagiC and HD Driver. Format floppies with complete control over the sector and cluster specs, make personal backups of disks using the "Disk Image" format.

\$ 6999 Cdn. \$ 4999 US



# Computer Direct

10338-59 Avenue, Edmonton, Alberta, Canada. T6H 1E6

Info & Support: (403) 496-2488 24 Hour Fax Line: (403) 496-2489



## \* \* Software Magic \* \*

Pagestream 2.2se  
 NVDI 4  
 STraight Fax 2  
 HD Driver  
 Super STario Land  
 Alien Thing  
 Genocide  
 Ultimate Arena  
 Teknoball  
 Killing Impact  
 Dino Dudes  
 Sheer Agony  
 Platonix  
 Stardust



### Used ST Software Starting at \$2.00!

New & Used ST's - Monitors - Hard Drives  
 Jaguar/Lynx Games & Systems - Accessories  
 Magazines - PD/Shareware Programs - and much more!

## The Computer Dungeon

*"your quest for software riches is over"*

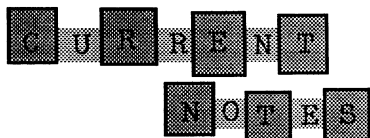
["http://www.mcs.net/~isis/dungeon/dungeon.htm"](http://www.mcs.net/~isis/dungeon/dungeon.htm)

1440 Spencer Ave.  
 Berkeley, IL 60163



Ph: 708-547-7085  
 Fax: 708-547-6550

Current Notes is distributed by mail to subscribers and other interested parties under the Canada Post Canadian Publications Mail Sales Product Agreement 0807656. Material submitted for publication & returned copies to be sent to: Hands On Communication, 46 Scotia Ave., Scarboro, On Canada M1L 4E6. All text & original graphics herein ©Copyright 1996 Current Notes.



Current Notes is published at least 6 times per year in Toronto, Canada. Subscriptions are available directly from Current Notes: CN SUBSCRIPTIONS & ADVERTISING

Current Notes attn: R. Boardman  
 46 Scotia Ave.  
 SCARBOROUGH, ON  
 CANADA M1L 4E6

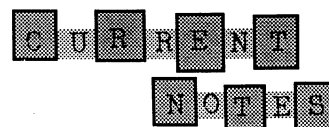
Phone: 905-427-7599 or 416-693-9679 for further information.

#### Subscriptions:

U.S. Rates: \$25/1 yr, \$46/2 yr. (US Funds)  
 Canada: \$35/1 yr, \$65/2 yr. (Cdn Funds)  
 Foreign: \$48/1 yr, \$90/2 yr. (US funds)  
 Personal Check, Money Order, Bank Draft payable to 'Current Notes'.

Letters, Problems, Beefs, Bouquets,  
Technical Questions, Help:

E-mail: [hcarson@io.org](mailto:hcarson@io.org) or [redfrog@io.org](mailto:redfrog@io.org)  
 or by regular mail:  
 CN Editorial attn: Howard Carson  
 3 Groves Lane  
 Ajax, Ontario  
 Canada L1S 3C7



#### Publisher

Robert Boardman  
 Hands On Communications

#### Managing Editor

Howard E. Carson  
 Futures/8-Bit Computing

Robert Boardman

#### Desktop Publishing

David Barkin, Howard Carson  
 16/32/64/Game &

#### Telecommunications

Eric March

#### MIDI

Lorant Oswald  
 alt.info.everything/News

Dan Dreibelbis  
 Shareware/PD

Denesh Bhabuta

#### Copy Editing/Research

Jack V. Reikel, Lianne Reitter

#### Stringers

David Troy, Steven Demetrius, Harvey Wolfe, Bill Johnstone, Steven Burris

#### Contributors

The dude who phoned us up and said, "Hey, how come you guys don't give away free stereos with your subscriptions like Time magazine does?" We told him to, "go and buy a Time magazine subscription!" He responded by saying, "but Time don't got no articles on TOS and GEM computers!" We told him we knew that. He then said, "you mean there's no way I can get a little stereo if I subscribe to Current Notes?" we told him, "NO!" He said, "well shit, that's a damn rip-off!"

#### Printing & Technical Support

MGI Software, Proton Research,  
 GreebleWorks!, TAF, The Printing House  
 East York ON, Canada (416)759-2219

Visit our World Wide Web Site at:

<http://www.io.org/~hcarson/cnpage.htm>

Current Notes is produced in Calamus SL on two main workstations: ① Atari Falcon030 running at 32 Mhz, equipped with the BlowUp FX expansion card, 20 MB RAM (16 MB TT-RAM, 4 MB ST-RAM) and, ② a Mega 8 ST (Turbo030/50 Mhz) driving a 24" Moniterm. All Layouts & Graphics are done in-house. Masters are produced at 600-1200 DPI by both HP Lasers and Imagesetters.

# ***Table of ..... Contents***

Howard, Robert, Lianne, Steven and Harvey pool their brain cells...

**PIMs?**

*A Review/Series on these handy things!*

**BIWES**

**#4 in the series!**

**Page 22**

***New magazines, old  
magazines, new  
software, new  
hardware, new Web  
sites, old Web sites!  
alt.info.everything  
page 16***

**16/32/64/compute  
game page 30**  
*Eric March has an  
interesting look at the  
'net and ftp.*



**We've gone  
review crazy!**

**Check out Dave Lee's full review of PageStream on page 24, enjoy Lianne Reitter's fascinating look at Rainbow II for the Falcon on page 26 (it's a multimedia authoring tool), marvel at Jeff Wisniewski's praise for the iPRN**

***You want to get ahead in a SOHO? On-line? You've got to sell right . . . futures page 6***

***Dans' Essential  
Web Sites. All the  
best sources for  
TOS/GEM support  
page 20***

**printing speeder on page 44, revel in the vast resource you'll discover when you peruse the Crawly Crypt Archive CD-ROM as it's reviewed by Bill Johnstone on page 46, get ready to clean up your hard disk and make it more efficient and reliable after learning about how chro\_Magic's Hard Disk Sentry helped technical writer Steven Burris (on page 47), and let Dan Dreibelbis walk you through the glories of the Freedom File Selector on page 49!**

*#3 in Lianne's super series on Drawing & Art Programs. page 34*

*Scott Chilcote continues his important series on MiNT/MultiTOS. page 37*

*There's a right way and a wrong way to do most things . . . really!*  
**big city byte page 14**

*The ultimate review? Hmmm, Photoline is awfully nice and David thinks it's cool too . . .*  
**running out of RAM page 9**

**we're really sorry -  
CyberSTrider got  
bumped this issue. We'll  
try not to let it happen  
again. We like Danny  
and we'll try and double  
up, next issue!**

**letters &  
technophobia  
page 52**

**classifieds**  
**page 55**

Lorant O. discusses RAM and S.N.O.T.  
- really - **MIDI page 8**

opinion, sense, nonsense, political reality

## F U T U R E S

*robert boardman*

***... whatever happens during the next few years, the times will be interesting and exciting ...***

### **This is our first milestone issue.**

This is number six for the Canadian team. One year ago we were negotiating with Joe Waters, the former editor / publisher / owner, for the purchase of Current Notes. This issue marks the end of year one of our ownership. Normally anniversaries are a time for seeing what is behind and what is ahead. I don't want to look at what is behind for very long; nothing can change the past. The future is beckoning however, and we can enhance the possibilities by what we do today. We have learned some important lessons over the last year.

Last issue I promised to provide some material to help you market your businesses. But there are some things that need to be said from an editorial perspective and we did not have enough room in this issue for both. So you get the editorial first.

We have learned some interesting things about Atari supporters and the Atari marketplace during the past year. Some of you have been kind enough to share your thoughts with us about computing, about Atari, and about Current Notes. We have tried hard to encourage you to write or phone with your comments and questions. It is easiest for us to deal with e-mail correspondence, though we recognize not all of you have access to an e-mail provider. Whenever possible then, we encourage you to write to us electronically. Sending letters by e-mail means we get them quickly, and if you have a question, we can respond much more quickly. If you have a question we want to print in Current Notes, we can even transfer your e-mail directly into the Letters column. That saves time and labour. Of course, we'll accept what Canada Post brings too!

### **What's ahead?**

We don't know any more about what is in the future than you. However, we can make some educated guesses.

Most important to Atari computer users, the Atari computer market is not going to grow. There are not going to be any new Atari brand computers. There are some superb new clone computers however, based on the Motorola 680x0 CPU chip using TOS/GEM as an operating environment. Computer Direct in Edmonton Canada and TOAD Computers have pushed ahead with what could be the fast-

est and most efficient computers available: the new 68040 and 68060 based machines. The market for TOS/GEM software is at best stable at the moment, and the market for TOS/GEM hardware will increase slightly because of the new clones.

Overall, the number of people who own TOS/GEM-based machines is shrinking. The future for TOS/GEM computing is in two places therefore.

First, those who keep their TOS/GEM hardware and those who buy emulators for either Intel-based machines or Apple-Mac systems (possibly a comparatively large market).

Second, the future for computers seems to be prefaced on their ability to communicate with each other. That communication is possible right now on the Internet and on what are being called "intranets," utilizing existing TOS/GEM software and hardware.

In the first few decades of the automobile, there were several forms of propulsion: steam, electric, diesel and gasoline. While none of the others actually disappeared, only one fuel is considered "normal" for family use. Diesel has found a long life in commercial vehicles, and there are two new fuels which have tiny portions of the market: propane and natural gas. But it is gasoline availability and prices that are of concern to the average inhabitant of the western world, not propane, diesel or LPG. Over its first few decades, the managers of the automobile industry decided to use the internal combustion engine fueled by gasoline as the technology of choice.

What seems to be happening in computer technology is a similar change. We are moving from a multiple operating system environment to a concentration on one or perhaps two operating systems: one for most users, and one for heavy duty users.

UNIX or something much like it will take top prize in the heavy duty market for the next few years. And it looks as though some easy to use, colourful, stable, GUI which is compatible with popular network software will be the big winner in the domestic market. Those requirements suggest an operating system like Windows NT. TOS/GEM meets all the requirements of a personal GUI, but was never designed to be part of a network, and being able to hook computers together is essential for business use.



## What do these predictions mean for Current Notes?

In order to keep Current Notes alive we need to attract new readers, new subscribers and new advertisers. Since the number of Atari users is not growing, we need to attract people whose primary computer is not an Atari. Some of those people are present or former Atari computer users who are now using TOS/GEM emulators on DOS-based or Mac-based computers. If Current Notes is going to be the best of the four TOS/GEM computing magazines in the world, it will have to provide information which bridges the gap between the different platforms that are now able to run TOS/GEM/MagiC software.

We have printed articles like that already. Much of what we have printed about the Internet, and much of what we have printed about desktop publishing is applicable to most computer systems. For example, colour correction and colour curves are common to all full-featured dtp programmes. WWW sites, e-mail, IRCs and ftp are useable on any computer platform. CD-ROMs are available for IBM and Mac clones as well as Ataris.

We can predict that we are going to continue and actively expand coverage of the Internet and the World Wide Web; we cannot afford to ignore one of the most amazing and profitable changes in computing, perhaps even in communications. We publish our e-mail addresses in every issue. We do as much correspondence and other necessary office work as possible electronically. We have set up our own WWW site to encourage anyone with Internet access to learn about Atari computing electronically. We see part of our role as being in the forefront of the information age for our readers.

## Why Internet?

Because it is exciting, because it is dynamic, because it has more information than anyone dreamed existed and because it is fun? Well, yes to all those reasons. Overall, the most important reason is that the Internet is a platform-neutral environment. I don't know how to stress that too much or too often for Atari computer users. My first personal computer was an Atari 130XE, which I still have. Hooked to a high speed modem through an 850 interface and using a great communications programme, I can read and send e-mail, use gopher, archie and veronica, tap into all the software I could ever want using ftp. No outside observer

can tell I'm not using a Sun workstation. I don't use my 130XE much anymore. My two main computers are a highly modified Mega 4 (described on the mast-head page) and a 386 DOS machine. Both machines give me a full graphical connection with the Internet and make the resources of the Web available. It doesn't matter which machine I use, as far as my Internet provider or those who read and use my Web site are concerned. STiK/CAB are just as useful as Trum-pet/Winsock and Netscape. I can modify my Web site codes with Marcel or 1st Word Plus on my ST, or with WordPerfect on my 386. I can save, modify or build all the graphics I could ever want for Internet use as easily in ImageCopy 4 on my Mega, as in Graphic Workshop on my PC clone.

## Why should you care?

This column focuses on the future of computer use, particularly small office computer use. If you have a small office or are employed at home for some or all of your working hours, you should be connected to the outside world. In any of my recent professions (teacher, trainer, Novell network specialist), I had to be connected with others in my profession. I had to have up-to-date resources. I had to know the latest and most important information. As a desktop publisher, those links are even more essential. I would not want to operate a home office without these electronic links to others in the same field. I would not want to operate without having as many avenues as possible open to me for research, resources, friendly advice, and money-making opportunities.

In a recent article in Byte magazine (August 1996), the author put forward four reasons why the Web is essential to business.

- 1) It's open: The Web is platform-neutral and global.
- 2) It's resourceful: Using the Web, you can update the look and the capabilities of legacy applications.
- 3) It's efficient: Web-server applications are becoming simpler to create and faster to use.
- 4) It's dynamic: Java and Active-X can help you build information-rich and customizable client applications quickly.

Don't throw out all these ideas because of #4. Although it is unlikely Java will be ported to the Atari platform, it doesn't have to be! The code can be written by anyone with a text editor, or by any word

processor that can save in ASCII. Reread point #1 – the Web is platform-neutral and global! While the editors of Byte probably did not have Ataris in mind, ease of access is the single most important feature of the Internet/Web combination. Not only Byte, but no major computer dealer or software developer or magazine thinks about Atari personal computers anymore. That makes the Internet and the Web more valuable to us than to users of DOS-based and Mac-based systems.

There is far more information available to TOS/GEM computer users on the Internet than in print. The amount of electronic information will grow and the amount of printed information will shrink as the pool of Atari hardware gradually shrinks. However, unless TOS/GEM computer users take advantage of the electronic information, it too will disappear, archived off systems and put on backup tapes in cold storage, inaccessible to mere mortals.

## What should you do?

- 1) Keep reading Current Notes. We will keep you up-to-date on whatever changes in computing are relevant to TOS/GEM systems. Send us your e-mail address. You get ours with every issue.
- 2) If you are not already connected to the Internet, then seriously consider purchasing a modem to join this great adventure. Get connected if at all possible.
- 3) If you run a BBS, find a way to get the relevant Atari newsgroup feeds from the Internet, via NeST, FAN, Maus or Fidonet.
- 4) If you use shareware ftp'd from the Internet, register it. Tell authors and developers what you like and don't like about their work. Make positive suggestions about improvements. Encourage them to keep writing. Use e-mail if possible.
- 5) Get involved in the Atari computer community. Join a user group. Write an article for their newsletter. Write a programme or an accessory. Send us your article for international publication.

What is ahead for Current Notes? Another great year of course! More information that you need to keep on computing.

[Ed. Note: Robert Boardman can be reached by e-mail at [redfrog@io.org](mailto:redfrog@io.org). His company Web site is located at <http://www.io.org/~redfrog/redfrog.htm>. He welcomes comments].▲



## **Lorant Oswald explains why RAM and S.N.O.T. have become so important!**

[Ed. Note: we really HAVE to discuss some of these acronyms . . .]

### **Growth and Change?**

*I realized recently how much the MIDI synthesizer industry has grown in the last couple of years. Keyboards that we admired, revered and honored not so long ago, are now more like once-expensive toys that we don't use anymore but don't want to throw out for sentimental reasons. Insisting on using such a board is like someone beating whipping cream by hand, instead of using a food processor, claiming that it will taste better.*

There are a few analog synths that have really unique sounds, which cannot be reproduced by any of the modern machines – but honestly, who needs them? Our collective musical taste has grown out of the whooshing, sweeping, wroahming(?) space colony noises. If you compare a typical synth from five years ago with a new one, you'll see major differences in two areas; displays are larger and shapes are redesigned, but I don't consider these changes significant. If you look carefully at the basic shape, the action, the controllers and buttons, you'll see they haven't evolved too much. The real development took place in the number and the quality of sounds. The majority of the older boards had about a

hundred different sounds. The new ones often come with several banks, each containing 128 patches. In addition to the larger number of sounds, their quality has also improved significantly. There are a lot more and incomparably better imitation-type sounds today, which attempt to sound like another sound source such as an acoustic or electronic instrument (violin or Hammond organ), or a natural sound (birds or waves). The reason for this is simple: the price of computer memory has dropped. That explains why the designers can fit 640 sounds on a board for the same price as 99 a couple of years ago.

And how does the price of RAM influence the quality of sounds? In most modern synthesizers the sounds are created using a combination of samples and waveform modulation. During the sampling process the source is recorded. The trouble is, this process requires a lot of memory. Have you ever played back a record on the turntable at the wrong speed? Everything is recognizable but

*"During the sampling process the source is recorded. The trouble is, this process requires a lot of memory . . . so the compromise is to use one sample for several notes."*

distorted. Similarly, when instruments are imitated, one sample spread out, transposed over the range of the keyboard would sound unusable outside the immediate neighborhood of the originally recorded pitch. The solution for this problem is relatively simple. One has to sample every single note available on the instrument.

### **New Problems?**

This process eats up huge amounts of memory, so the compromise is to use one sample for several notes. That way the memory requirements are reduced and acceptable levels of fidelity can still be produced. The lower the price of the memory, the greater the number of samples that can be fitted into the instrument.

This is not all, however. The quality of the sound of an instrument doesn't only change with the pitch. Every instrument can produce several different, characteristic sounds. There are a number of registers where the sound of any instrument is distinctively different. When you change the pitch, the volume or the method of producing sounds, the result is very noticeable. Imagine the timbre of an instrument you know. Maybe you even play an instrument. Perhaps you even have an instrument within reach. Don't hesitate to bring it out. I'll wait. Right. (What, you say you don't play anything? Well, try singing or even speaking.) Now play the instrument as softly as you can. That's good, I can

continued on p. 41



# running **RUNNING** **out of RAM**

*david barkin and his mutt, wander & wonder*



**Photoline, the latest Atari Image Processing program has finally been released and I finally get my chance to use it and by gosh, to review it. Photoline, by Computerinsel Ltd of Germany, is being imported into North America by HOMA Systems. HOMA has also**

**written the manual. This program will run on any ST,TT, Falcon and if you're equipped with MagiMac, any 68030 or better Mac Computer.**

I've tested it quite thoroughly on my Mac Powerbook. Potential buyers should be warned that without 256 color capability images can only be seen in dithered monochrome. Photoline will run in ST High and TT Medium but in either of these resolutions images are displayed in monochrome. Photoline will not run in other ST/TT resolutions. Thus ST and TT owners MUST own a Graphics card to use Photoline in a productive manner. Falcon owners will not suffer from this problem.

I like Photoline. Aside from a quite usable interface, powerful features and the

**Mr. Barkin takes a reviewer's hard look at Photoline. It's a powerhouse of details and effects, and Mr. Barkin likes it a lot! He also makes some interesting Photoshop and DAs Picture comparisons . . .**

ability to create and edit Vector objects as well as true color, greyscale and monochrome images, Photoline is FAST! It has the ability to process photographic filters at speeds unmatched by other programs. Aside from all these features it suffers from being overly hyped by the importer and it suffers from a manual, which to be complimentary, I will refer to as barely adequate. HOMA Systems describes Photoline as a "Photoshop Killer." The claim is quite a stretch. Photoline makes mincemeat of Photoshop only in the speed department and this can be said for quite a few other programs. Even so, it's a good program and I'm enjoying using it.

Photoline is priced at something over \$200 and is supplied on three double density disks containing two versions of the program: one for computers with Math Co-Processors (FPUs) and one for computers without. The co-processor version is the one I installed on my TT. Since my Mac Powerbook lacks a co-processor I had to install the ST version of the program on the Mac. The software's copy protection scheme is I can live with. Once the program is installed you must type in your name and address under the Info menu of the program. This information is now embedded in the program and that's it! No other copy protection is used and you're ready to roll.

## **THE INTERFACE**

Photoline has chosen the Photoshop look for it's interface. Das Picture, another powerful Atari program, has taken this

same path. Das Picture is a program which I find very clumsy to use. The difference between Das Picture's rather awkward functionality and Photoline, lies in keyboard shortcuts. Das Picture has few and Photoline supplies almost every function with a keyboard equivalent. While the beauty of using a mouse, when you haven't mastered a program, is the ability to go to a menu and manually select a function, as time goes on and the program becomes familiar, you can slowly memorize the keyboard equivalents. I only wish Photoline would allow me to edit the keys for these equivalents.

One problem these programs share is that tool boxes and dialog boxes can obscure the working image or the image can hide the tool box. With Photoline it's possible to position all these boxes in areas where they won't get in the way. Once you learn the keyboard equivalents you can even hide the dialogs. These positions as well as a host of other functions, such as file parameters, etc., can be saved. This should definitely be done or your work session will consist of constantly moving images and dialogs from one position on the screen to another.

One limitation to the above noted ability to save parameters, is Photoline's copying of certain aspects of the Mac. When parameters are saved, the program has the nasty habit of automatically saving the access path to your disk drive as a parameter. This makes sense for the Mac, with its OS, which assumes you're a moron and stashes every file you create in the same directory. But we Atari users like to vary our locations and it's annoying to start a work session to find the Photoline looking for files in a rarely used directory. It's an annoyance with the Mac OS and a minor annoyance with Photoline.

## IMAGE PROCESSING

If you are familiar with the Mac platform then you must be aware that Photoshop is considered the standard for all Image Processing work. It's also considered the standard for the IBM world. For this review, I bit the bullet and installed the full version of Photoshop, version 3.0, on my Powerbook. Up until now I've been using Photoshop LE and Photoflash, programs which compare unfavorably with Studio Photo. I've used the full version of Photoshop only on a friends Power Mac and assumed (and we all know what assume means) that its little relative was faster than the full blown

program. Such is not the case. Photoshop runs twice as fast as the LE version. This would be impressive if I didn't use Atari software. To rotate a 1 Meg file, an arbitrary 12 degrees in Photoshop, takes 16 seconds on my 25 Mhz co-processorless Powerbook, Photoline will rotate the same image in 3 seconds. The same file on my slower, co-processed TT, only takes 4 seconds.

Most of the other functions in Photoline show a comparable speed increase over other Atari (and Mac) programs. Before delving into areas where Photoline lacks power let's take a look at the programs capabilities in general. Figure 1. shows the working screen with all of the various drop down menu's. You can see that just about every function has a key equivalent. This also brings up one of Photoline's strong points. Figure 1. was created in Photoline using the

to end the operation. Position the cursor over the outlined area and drag it to a new place in the same image, or move it to a different image and drop it off. The lassoed area can still be moved around until positioning is satisfactory. Double click on the rectangle and it's pasted, a part of the image. The lasso area remains selectable and usable, almost (but not quite) like a brush.

When lasso is selected from the tool box an associated dialog pops up allowing the intensity of the lasso to be selected or changed to opaque or varying degrees of transparency. Using this dialog I could have also cut the lasso from the original image and created a new image consisting of just the lassoed area. In fact the opacity of a captured lasso can be changed at any point in the above description. circular lasso works in the same manner and freehand lasso lets me

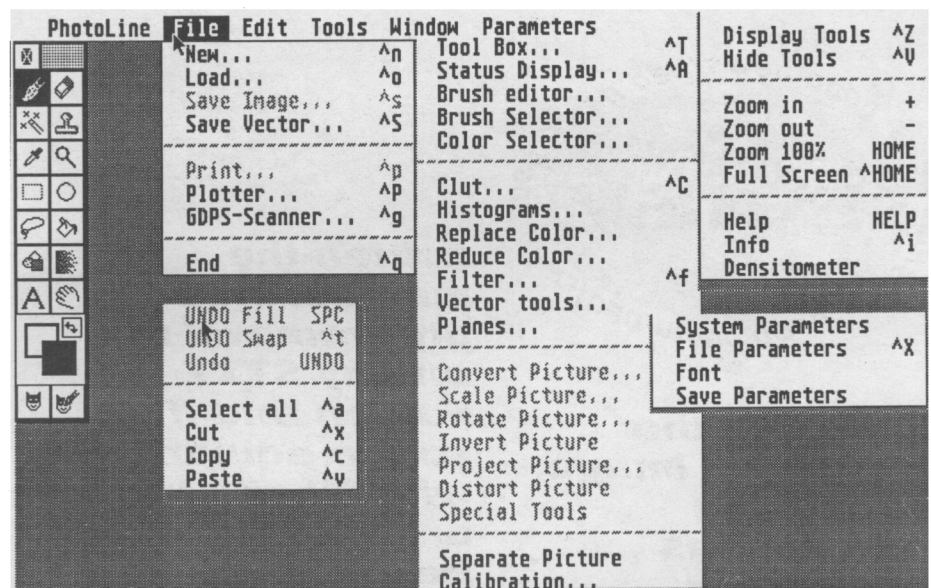


Figure 1. A composite screen shot of the Photoline program showing the drop down menu's. As you can see they've been shifted around because of a lack of space.

'Rectangular Lasso' option. Lasso in all its forms is a cutting tool. Photoline provides three methods of using it: Rectangular, Circular and Freehand. They all work quite well and are integrated with the Mask function. With the rectangular lasso, after selecting the option from the tool bar on the left of the screen (or hitting 'Shift + F2'), simply position the cursor at the start point of a cut, hold down the left mouse button and move the cursor to the end of the desired cut. Click the right mouse button

cut out parts of my image either with continuous straight lines or a freehand shape. This allows for absolute fine tuning when cutting out a desired area. The dialog box in turn provides more options for converting a lasso area into a mask or a masked area into a lasso! These lassos and masks can be saved and will reload at the same point in the associated image. The user has to remember to properly name these masks/lassos, so that you know which is which because they are NOT saved as part of the file.



## MASK

Photoline has powerful Mask functions. The mask in an Image Processing program serves to protect the area which is masked (covered) from being affected by the action or actions of other parts of the program. If you cover part of your image with a mask and change the contrast or apply a filter to your image for example, the masked portion will remain unchanged. Masks can also be used in making photo collages by protecting an area of an image. You can paste down a new image and make it appear to be behind the protected, masked part of your image. Photoline supports one level of masking. Das Picture is the only Atari image processing program with multiple levels of masking. Multiple levels of masking permits much more flexibility by allowing changes to affect levels of color in a masked area while protecting others. With only one level of masking, it's either all or nothing. Still, this is not as important as it might sound. Areas can be masked and re-masked to provide the same effect in almost the same amount of time.

Photoline also supports automatic masking. Using the 'Magic Wand' (I hate that name) you can go to an area of your image and by holding down the left mouse button choose a color to be masked. You also specify the level of associated colors in the area and presto you mask a specific object. Photoline even gives you the option of defining that stray pixels which are yellow, for example, will also be covered by the mask. This option is defined not by color but by the number of stray pixels. It works surprisingly well.

## FILTERS

The Photoline filters are built-in and though limited in number, are quite powerful. The more important are Edge (Sharpen) which heightens the contrast between neighboring pixels of an image. This brings out hidden details. Blur, which lowers the contrast between pixels, thus softening an image (Blur has the weakest implementation of all Photoline's filters and is actually found under the tools menu). There is UnSharp Mask, a filter not found in any other Atari program, which both blurs and sharpens images depending upon the data in the image. This powerful filter creates two versions of the image, one blurred and one sharpened. The sharpened image is created by making a

black outline around each pixel. Finally, according to parameters which you set, the two images are overlaid, the result being that each pixel is blurred slightly outside and inside each pixel, but only around the black outline, which at the same time acts to heighten the contrast. It produces a very powerful effect to sharpen the focus of your image while limiting the creation of 'pixelation' associated with the normal Sharpen filter.

There are ten other filters plus a DIY filter editor. This comes equipped with an additional twenty filters which perform all sorts of tasks. While the instructions for creating your filters are, to say the least, limited, the plain fact is that working with sophisticated filters should be considered an investment and a stimulus to go out and buy a good book on the subject. These filters pretty much match the standard filters which come with Photoshop. The one exception being a Photoshop filter called Gaussian Blur which acts to create a transparent 'curtain'. Photoshop also has the enormous advantage of having a Preview Mode, allowing the effects of changes in any filter to be seen in advance of any application.

All the Photoline filters come equipped with a slider bar to adjust the intensity of the effect. Many have a threshold option so that some levels of color will be unaffected. There is also a color selector so that effects can be limited to selected colors, either RGB (Red, Green, Blue) or HSV (Hue, Saturation, Value). Photoline also supports working with CYMK (Cyan, Yellow, Magenta and Black) colors and images. Generally the tools are set to work in the first two modes.

## TOOLS

Photoline, while not a full fledged paint program, comes equipped with some interesting tools. Once again these tools are integrated in an interesting manner. There is a brush editor and a brush selector. These two dialogues are used for ALL the drawing tools. The editor is especially interesting. You can alter the size and shape of the brush. This process includes the density of the individual brush: the center of the brush can be solid while the outside is translucent for example. After creating a brush you simply drag it over to the selector dialog and drop it down in one of the 24 slots. You can save and load an unlimited number of these as libraries of brushes. The editor even allows access to the Gradient curves, so that the saturation of the resulting brush can be precisely controlled. All color selections for tools and effects are done with a sophisticated color dialog. There are sliders for the color scheme you are working with and above them a graduated view of the colors involved. You can simply select a color from the displayed gradation or select a color using the sliders. In either case, using one selection method changes the settings on the other.

The actual tools consist of a Paint tool, used for drawing, the Finger, which acts as an anti-aliasing device, a localized Flood tool to saturate part of an image and a Copy tool, which acts as a duplicating pencil. This is a powerful tool with a number of sophisticated options. You can copy an entire image or portion of an image from one frame to another and set it to work in a number of ways. Finally there is the Stamp tool, also powerful, which can work in conjunction



Figure 3. On the left, the original TIF of my dog and friend. On the right, the same picture after accessing the projection tool.

with lasso. Simply grab a portion of an image and you can literally paint with it. More important, Stamps can be freely loaded and saved, providing an endless array of effects.

All the above are selected from the Toolbox displayed on the left hand side of the screen. Photoline presents you with variations of these tools available from the drop down menus. Thus Flood Fill from the drop down menu covers the entire part of the image which is not protected by a Mask. Conspicuously absent are an entire series of tools found in other high end programs: localized sharpening, blurring, spray can and quite a few others. A program like Das Repro even comes with a localized UNDO tool. This means you can expose the last global change in your image with a brush.

## CLUT

The CLUT (Color Look Up Tables) which I happily refer to as the gradient curves, is where contrast and color saturation are adjusted. This is a very strong part of Photoline. Curves can be set manually, with Bezier curves (two varieties) and straight lines. You can even enter these values with text and see the results of your manipulations in text. The bezier curve options allow the addition of control points so that extremely complex curves can be achieved. There are other handy do-dads and options. You can even turn your adjustments into 'steps'. Furthermore you can watch the changes as you work, taking place in real time, but only becoming permanent until after you're satisfied. There's an odd little adjustment in the dialog called 'Real Time' which may be useful on a slower ST.

Before discussing the Special Tools and the Vector side of the program I should add a little about the interface. Photoline does not access your disk drive for additional memory. This is the one BIG advantage Das Picture has over the program. It also means that the UNDO Buffer has to be used with caution. This buffer uses as much memory as the current screen. Each image can hold it's own UNDO Buffer and RAM can become critical. Hitting the Space key activates the UNDO Buffer for the selected image while hitting 'Control + t' switches the UNDO Buffer with the image on screen. The program Outside, which allocates space on your disk drive as memory, will work with Photoline. So if memory is a serious consideration you must opt for this program.

ZOOM is another useful part of the interface. Initially I was very disappointed with Photoline's implementation. Accessing ZOOM from the drop down menu and the '+' and '-' key simply increases and decreases the image size without control over where you are going to be looking. Then I found that there is another zoom option available. Hitting F1 turns the cursor into a little magnifying glass which can be positioned, and with each mouse click raise the magnification one level. Holding down the shift key lowers the magnification.

You can pan through your magnified image by selecting the move option and the cursor becomes a hand which you drag through your image, which in turns shifts the image. Redraws for both Zooming and Panning are for all practical purposes, instant.

## SPECIAL TOOLS

Special Tools are the bells and whistles of Image Processing Programs. Photoline comes with quite a few although they are scattered all over the program. The first, called Process Blend is actually a necessary part of a good program. It creates color fades and graduations from selected colors, where you choose the start, middle and end point as well as the direction. You also choose whether this blend will be circular or linear. It is this blend tool which you would use to create shadows and other effects in images, especially where collages are being created from different images with different light sources. This tool is selected from the tool box.

Two other tools deserve special mention. The Distort Picture option presents the operator with a definable grid. Grab a point on the grid and the image beneath the grid changes with your movement. You can make a frown a smile, a thin person fat. It's one limitation is that you are working at a fixed magnification. Smaller images are difficult to work with because it's difficult to make precise selections. So while this tool is powerful its usefulness is limited by the implementation. The other tool is the Projection Tool and it's a real winner. In a separate dialog you draw simple, 2-D lines. The dialog, once again with user definable parameters, then extrudes a three dimensional shape upon which you can 'Project' your image. This three dimensional shape can be rotated in any combination of the x, y and z axis and you can stipulate how much of the resulting object can receive your image. This entire implementation works flawlessly and even shows you the part of your three dimensional object that will be visible after projection. Both Project

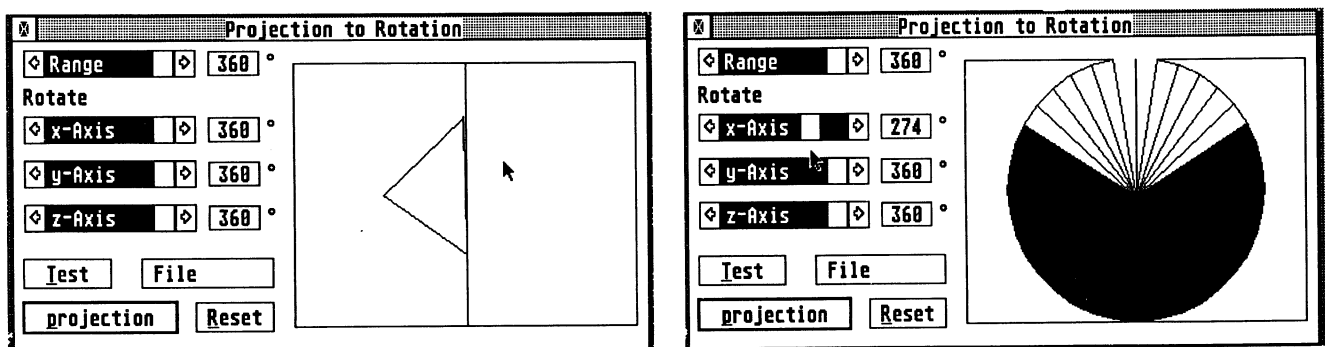


Figure 2. These figures illustrate the use of the Projection dialogue. On the left is the drawn two dimensional shape. After adjusting parameters we get our result on the right. Finally, clicking on "Projection" gives us our finished image.

and distort have built-in preview modes and there's nothing like either of them in Photoshop. There are expensive, 3rd-party plug-ins for Photoshop (KAI Power Tools) that will perform similar tasks. The nearest standard Photoshop equivalents are in the filter area of the program and allow various distortions of the image, which while powerful are much more limited than the projection dialog of Photoline.

## **THE VECTOR PROGRAM**

Photoline comes equipped with its own Vector Drawing program which includes a built-in auto tracing utility. Monochrome bitmap images can be converted to vectors. There are no parameters, merely the command to convert, but it does a good job. The resulting Vector files can then be colored. The vector parameters dialog allows separate colors for the object, the outline of the object and the color and position of the shadow. Vector objects can be drawn using the same parameters as used by the lasso command. The Vector part of the Photoline is not a full fledged program, but it does allow freehand drawing and combining your work with the raster part of the program. It's a more than adequate compliment to the image processing functions. Although CVG and GEM Metafile formats can be created I had trouble loading the results into Calamus. The files loaded into Outline Art 3 or Das Vector and could then be re-exported. Some sort of minor bug is at work here, but eventually I could get every object to load into SL.

## **MISCELLANEOUS**

Photoline does its printing through NVDI. It also has a text feature which can only be used if you have NVDI. According to the manual, you can choose either GDOS or CFN (Calamus) fonts and can set the degree of transparency. Printing is done through the NVDI drivers. I do all my printing through Calamus SL and use image processing programs to prepare for

import to DTP programs. DTP programs provide more control of output than image processing programs. I don't doubt that the above features work as described. Photoline also allows for the purchase of optional scanner drivers for the HP and Mustek line of scanners. In addition there is support for an optional HP Plotter driver.

## **FORMATS AND COLOR SEPARATION**

Formats supported by Photoline for the Raster side of the program are: Degas, TIFF, ESM, IMG (and its 24 bit cousin XIMG), IFF, NEO, PAC, GIF, JPEG in all its modes and finally for BMP and PCX but only in 8 bit mode. On the Vector side Photoline supports CVG (which is pretty much an Atari only format) and GEM Metafile. Photoline supports color separation; the dialog is limited but will give excellent results. The levels of color removal, black plate, grey levels, etc., can be adjusted with Photoline's superior CLUT controls.

## **SUMMARY**

There were a number of disappointments with Photoline. Chief among these is the lack of adequate on-screen color calibration. You can calibrate the colors in a simple dialog where you alter CYAN for example, to visually match what will print, but this dialog makes no allowance for Gamma correction, which is the spreading of printer dots that takes place in the actual printing process. As a result I found it impossible to load an image into SL and get a decent result after Star Screening an image. I could, to a certain extent, manually compensate for normally screened images. No doubt the built-in printer drivers do compensate for Gamma but that's not the point. Bringing my image to a service bureau will demand a more exact calibration. A user of Photoline will have to depend on the workmanship of their service bureau. There are many other areas where Photoline is simply not in the same

league as Photoshop. In the course of this review I had to really learn Photoshop and I've found that Das Repro, that obsolete wonder of the Atari World, is actually a program with more depth and power than Photoshop. It suffers from being five years old with a fixed number of filters and other tools. But these tools and filters are much more powerful and provide far more control than the ones in Photoshop and Photoline. Das Repro is increasingly difficult to acquire.

Almost all the Image Processing work that I do involves acquiring images and correcting them for output in small newspapers and flyers. Photoline because of its superior CLUT capabilities is perfect for this job. Indeed it is in its CLUT capabilities that Photoline need not take a back seat to any program. If this is what you wish to do then Photoline's speed, extremely well implemented Projection option and its Unsharp Mask filter make it an ideal program. But for photo restoration, color processing, pre-press output and other sophisticated techniques you will need additional software. If you can acquire Das Repro you will have the tools to match any other programs and this is especially so for pre-press output where Das Repro holds a big edge over Photoshop; Repro is that strong!

Not only can Repro calibrate for color on your monitor but it also calibrates for color AND Gamma for your printer, an area where Photoshop, despite numerous dialogs is weak. Photoshop depends too much on the built-in algorithms of Mac printing routines and fails to match Repro in real-world control. This entire question is an area where Photoline is simply not in their league. Taking all my warnings to heart, Photoline comes with my recommendation.

Positive Image should be out by the time you read this article and promises to have more flexibility than other programs on the market. I can't wait to try it out on one of the new Atari Clones now becoming available. I've ordered a Clone with a 68060 Motorola processor and this machine promises to be 14 times faster than my TT. Now that's power!▲

**Why not make the Current Notes Web Page your start-up bookmark or Home Page? Put us in your Hotlist as:**

**<http://www.io.org/~hcarson/cnpage.htm>**

**The Current Notes site contains dozens of great links, access to all the best web search engines, the latest developments at the magazine (upcoming articles, news and info), hints, tips, and Dan's List Of Cool Web Sites!**

**If you'd like us to include your URL on our site, submit it to 'hcarson@io.org' and we'll check it out.**



# BIG CITY BYTE

Howard Carson

**advice, warnings,  
opinions . . . and a little  
armorplate to help get you  
through the day!**

**We were walking intentionally on W90th, toward Riverside Drive. It was early evening. La Girlfriend and I wanted to take a brisk walk along the river.**

The lowering sun was pleasantly mild, a few scudding clouds were ambling along high overhead, and there was only trace of humidity in the air.

Manhattan on an early summer evening; not bad at all, if you can stand the smell.

We lapsed into a peaceful reverie momentarily (something which you must never do in Manhattan). Only another moment later, an evil looking brigand leapt from a darkened doorway and confronted us while brandishing a nasty looking blade of some sort.

"STAND AND DELIVER!" he grated, loudly.

'Stand and Deliver?' I thought to myself, 'this guy has been reading some very old books'.

"Uh-huh," I said out loud. "Fine. Whatever you want pal. Just let the woman go, OK?"

Capone jumped about six feet straight up. He hadn't noticed my girlfriend standing right beside me.

"Uh, sure . . . OK, yeah," he stammered. Then in a louder voice: "G'wan, beat it lady!" She took off.

He turned back to me and fired off what I suppose was his best stare.

I stared back.

After nearly a minute of total silence, I realized I was not involved in a standard

mugging.

"So," I began, "what was it exactly that you, um, wanted?"

"STAND AND DELIVER," the idiot intoned again.

"Right. Cool," I replied, "but what exactly is it that you want me to 'deliver'?"

"Oh right. Heh. Gimme all your money," he said after a moment, "and, uh, any software you happen to be carrying. Just stick it all in the bag."

"Uh . . . what bag?" I asked gently. El Dorko wasn't holding a bag, and I sure as heck didn't have one.

"Aw crap!" he exclaimed. "I forgot the damn bag. Geez. Well, um, OK then, just stick it all in my pocket." He sidled towards me; his right hand held the pointy looking weapon and he was using his left hand to hold open the pocket of the long coat he was wearing.

"Aren't you a little warm in that thing?" I asked, pointing to his outer apparel.

"Uh yeah . . . a little," he replied pleasantly. "Um, it's nice of you to ask." The sweat was actually starting to trickle down his forehead.

"Now," he went on, "could you PLEASE give me your money and any software you might be carrying?"

"Well," I said equally pleasantly, "my girlfriend and I were really only out for a brisk walk. I've got 30 bucks on me and I, uh, certainly don't have any software at the moment. Why the hell ARE you asking me for software, by the way?"

"Whaddaya mean 'Why'?" he replied, surprised. "Don't you know how much that stuff costs these days? Don't you read PC magazine? John Dvorak? Michael Miller? All those other guys in Byte, PC Computing and MAC User? All they ever blab on about, is four or five hundred

dollar PIMs, Databases and Document Processors! I mean GEEZ! You'd think the whole flippin' world was made of money. You'd think that every reader who'd ever picked up one of the big magazines was independently wealthy. You'd think that anyone who didn't have the means to buy every new piece of code-bloated nonsense was a poor, dumb beast, fit only for dissection and study. And you're askin' 'Why'?

"Uh, well . . . kind of, yeah," I said sheepishly. "I mean, I also kind of agree with your attitude. But do you really think this is the best way to go about getting what you need? If you're stuck, why not just grab a copy of whatever it is you need, you know, from work or from a friend?"

. . . wait for it . . .

"What!?!?" the Dufus yells. "What do you think I am, some kind of thief?"

. . . rimshot . . .

About ten seconds after that great punchline, my girlfriend came charging around the corner, Police in tow. One of the Fuzz cuffed Mr. Dopey and threw him in the back of the cruiser while the other one asked me the usual questions and took notes.

Meet Officers Ed Loomis and Phil Gilhooley. A Black American and an Irish American, partners, questioning a Jewish Canadian, an Austrian Scottish Canadian, and some looney, revanchist, computer nerd of indeterminate origin. Kafka never dreamed of this.

" . . . and ye'll be wantin' a bit 'o time to calm yersel', sir?" Gilhooley went on.

"No, no I'm just fine officer," I replied affably. "There's been no harm done."

"Well that's just fine then," Gilhooley replied. "If ye'll just tell me your side o' what happ . . ." Just then, Loomis walked up and whispered in his partner's ear.

Loomis had been chatting with Senor Nerdo, in the back seat of the patrol car. Gilhooley looked very sharply at me after the tete-a-tete with his partner.

"What, sir," Gilhooley intoned, staring at me, "is the meaning of all this nonsense then?"

"Uh, I'm not sure I understand your question officer," I said, startled.

"That poor man in the back of the patrol car is just tryin' t' get by as best he can, the poor lad," Gilhooley said. "D' ye' really have t' bring yer charges against him?"

Obviously, I'd missed something, somewhere, because the conversation sounded for all the world as though I was the one (suddenly) who'd done something wrong. Just then, Loomis walked up with El Thiefo-Wrongo. Uncuffed. It was getting more bizarre every minute.

... wait for it ...

"Now young man," Gilhooley implored the goof, while Loomis glared at me, "the next time ye' get the urge to do what ye' just attempted to do, think for a moment. Think about what it is ye'er after. Look around ye'. If you need a piece o' software that everyone else is usin', do the same thing they do: bring some blank floppy disks t' work and copy the blasted thing!"

... rimshot ...

Only nine weeks ago, in Montreal, the RCMP busted a warehousing and distribution operation and seized 800,000 illegally copied CD-ROMs. Name an important piece of software: it was there. 800,000 copies. That's a lot of copies, and producing them required a large bankroll. Even if you can secretly crank out CDs for 75 cents each, including the cost of the blanks and cutting machine(s), you've still got to come up with \$600,000. But if you can add documentation (manuals) for \$5 each and packaging for another dollar (on an as-needed basis), you can move wholesale lots of the contraband for around \$20 a throw. After expenses, the potential net is about \$12,000,000. That's twelve million real, U.S. dollars.

I could go on.

There is endemic, systemic corruption built into a lot of huge industries. The growth of such an unbalanced dynamic, is a natural antecedent of corporate hegemony. It leaves consumers and low-to-mid echelon rank-and-file, in a difficult, tenuous, low-paid strata of western society, faced with some difficult and tempt-

ing 'purchasing' decisions.

Software which should be priced at \$79.95, is being sold for \$399. That's mean; real mean. It is certainly easy to see why a large segment of the computer-using population might be attracted to some degree of larceny. Ten years ago, software manufacturers were largely shocked and amazed at how quickly their products were pirated and illegally redistributed. They (sort of) pleaded with the public to cease and desist such theft, but did precious little to safeguard their products; the short-sightedness of serialization and registration schemes is absolutely unbelievable. Public acceptance of software theft and copyright violation is so pervasive that even the cops have trouble getting excited over such crimes. A case can be made for the idea that software manufacturers prefer a certain level of theft and piracy because it allows them to maintain high prices. If it's true, it is also an indication of how skewed our thinking has become when dealing with the monumental forces at play in the giant consumer marketplaces in the western democracies.

So what happened to our would-be mugger? Well, since he was being formally arrested we had to go down to the police station and talk to an A.D.A. The harassed A.D.A. looked at us as though we were crazy.

"I don't get this," the A.D.A. sighed, "you want to charge this person with an attempted mugging? Software theft? What?"

"Well he did try to mug us," I said. "He just wasn't very good at it."

"I'm not surprised," the A.D.A. said. "There's no 'sheet' on him. If he's done this before, he's never been arrested; probably a real amateur."

"I guess so," I replied, "and that software nonsense was pretty bizarre too!"

... wait for it (with apologies to Corel and Mike Cowpland) ...

"Not so bizarre," the A.D.A. said offhandedly, "and the D.A.'s office is taking a more and more serious approach to software theft and large scale piracy. But this guy is a real idiot. Why the hell didn't he just grab a copy of Wordperfect from work. Geez. That's how I got mine ..."

... rimshot ...

It never ends. And when grabbing a copy of \*anything\* becomes universally (or at least pervasively) commonplace (no matter how fundamentally illegal it is), anyone who comes along and says, "hey, that's not right," will be seen as

some sort of nut. Certainly there is no question the lawful authorities have no intellectual means to cope with the monstrous dynamics at play in the marketplace; as a massive bureaucracy, they can only deal with general issues. Decidedly minor crimes committed against impeachable individuals (read: common citizens) therefore, retain less efficacy in the eyes of the judiciary, than those crimes which present larger, more remunerative targets. The perception of law is modified by practical confluence and agglomeration of accepted habits. A little bit of larceny in the U.S./Canadian marketplace (which is comprised of 300,000,000 people!) will always go unnoticed (or at least unremarked, although the real dollar value is not for the faint of heart). Just remember that if you decide to bring a product of your own to market, someone will steal it. And just remember that if your product is any good, at least a third of the individuals singing its praises (or leveling vicious criticism) will be folks who never paid a nickel for it. Remember too, that if your product is at all successful, you can always make an extra buck selling repackaged versions of the Operating Manual to all those who stole the software! Forewarned is fore-armed. < sigh >

There are a lot of taxpayers who would prefer the local police, state, provincial and federal authorities spend their budgets on murder, hard drug and illegal immigration investigations. The same taxpayers might be persuaded to purchase Wordperfect for \$79, rather than obtain unsupported copies. For pirates, underselling a \$79 price point is a lot harder than underselling a \$300 price point. As well, retailers would also be far less tempted to take chances on being caught with contraband. After all, buying a pirate copy for \$50 and reselling it for \$200 is one thing (you're taking a wildly stupid chance), but buying a pirate copy for \$50 and reselling it for \$70 is utterly moronic. The software manufacturers aren't going to play ball; they don't have to play ball. We'll have to wait for the market bubble to burst (see you in 2001? 2002?), or a software design paradigm shift so great that current standards will be radically altered. Don't hold your breath.

In the meantime, stay away from darkened doorways, Caveat Emptor, suffer fools gently, write letters of complaint to all software companies producing bloated code, and above all else never leave home without a floppy disk full of popular, registered shareware?▲

©Copyright 1996 Howard E. Carson. All rights reserved.



dan dreibelbis reports from  
around the world

# alt-info-everything!

What's  
New?

MAGAZINE

**FIRST, A CORRECTION:** In the last issue, I mentioned a new product from C-LAB, the ST-zer, that was a plug-in card for a PC. It now turns out that the ST-zer (suggested retail \$350 US) is a complete Atari ST clone on a card, complete with MIDI i/o ports and a cartridge port. It's NOT an additional card that runs alongside GEMulator. My apologies to C-LAB and to Branch Always for any confusion this may have caused.

**ST FORMAT DEAD:** Future Publishing, has announced that they will cease publication of the long-running ST Format magazine as of Issue #86 (September 1996). The magazine, which started life as ST/AMIGA FORMAT back in 1988, was the last of the UK newstand magazines for Atari users. Its death follows that of their most recent rival, ATARI USER, back in April. Its eight-year run is definitely an achievement for any non PC-Compatible magazine. It will be missed for its dedication, many articles of interest, and attempts to inject humor. A new website, consisting of STF articles from former writers, has been set up by ex-STF staffer Frank Charlton at <http://www.netkonect.net/tachyon/A3>

**NEW UK ATARI MAG:** In the wake of ST Format's death comes word that a new Atari/TOS magazine will be launched sometime in September. Here's the press release:

(29th July 1996): Mike Kerslake, a magazine publisher with over fifteen years experience has signed up Frank Charlton, ex Features editor at ST Format and Joe Connor, ex Reader Disk/Public Arena editor for Atari World, as joint editors for a NEW printed Atari magazine called Atari Computing.

The launch issue of Atari Computing will feature 60 A4 pages crammed with quality editorial. We're delighted to welcome contributions from respected and well known journalists including Graeme Rutt, Jon Ellis, Denesh Bhabuta and Kev Beardsworth.

We're delighted to announce we've signed a deal with the two leading disk based magazines, AtariPhile and Maggie to contribute regular sections in our magazine. If you've never seen a disk magazine before we think you'll be amazed to find out what you've been missing!

The launch issue will be on sale at the forthcoming Atari shows so why not attend and meet us? The shows will be held on Saturday September 28th in Birmingham and Sunday September 29th in London, for more details about the shows contact: Goodman International, Telephone: +44 (0)1782 335650.

Issue one is still in the planning stage but here's just some of the articles we're working on:

- News and gossip put together by Graeme Rutt and Frank Charlton including details about the Atari Computing website.
- Software reviews including HD-Driver by Jon Ellis
- Hardware reviews including Nemesis DIY by Simon Coward
- PD/Shareware reviews of MagiC utilities including Start Me Up! and Stewart
- Preview of MagiC v5 by Thomas Binder, Kandinsky v2.5 by Kev Beardsworth and Stella by Joe Connor
- Music and MIDI primer
- User group reports co-ordinated by Al Goold including feature on Spanish Atarians by Andrew Harvey
- Atari Jaguar coverage
- Lot's more

Remember:

MAGAZINE

- Atari machines can be purchased and repaired on a shoestring
- Atari machines can produce superb printed output
- Atari machines can surf the Internet and run BBSs
- Atari machines can form the nucleus of a digital music studio
- New software of better quality than ever before is still being released!

That doesn't sound like a dead



platform! The Atari platform has been emulated by just about every other platform, we're owners of cult machines! Have you ever noticed ex-Atarians animatedly talking about the 'Good old days'? It's a feel good factor missing from all the current machines.

#### FAST FEEDBACK REQUEST

If you're on-line we'd like to hear from you right now! We're keen to get an idea of demand for the mag. To reserve copies send an empty email with the title line, 'KEEP', and if you'd like two copies simply add the number afterwards: 'KEEP 2', etc. Thanks for taking part! Email: [atari\\_w\\_admin@cix.compulink.co.uk](mailto:atari_w_admin@cix.compulink.co.uk)

#### SUBSCRIPTIONS

United Kingdom

Send cheque/PO made payable to the 'Atari Computing Group' to:



Mike Kerslake  
42 Larch Hill  
Handsworth  
Sheffield  
S9 4AJ



Telephone/Fax: +44 (0)114 2618940 - 10am to 6pm, Monday to Saturday. Email: [mkerslake@cix.compulink.co.uk](mailto:mkerslake@cix.compulink.co.uk)

Initially we're offering a single evaluation copy or three issue subscriptions at the following rates inclusive of post and packing:

Evaluation Copy (magazine only): UK-£3 Europe-£3.50 USA-£4

Evaluation Copy (with reader disk): UK-£5 Europe-£5.50 USA-£6

Subscription (magazine only): UK-£9 Europe-£11.50 USA-£12

Subscription (with reader disk): UK-£15 Europe-£17.50 USA-£18

Payments for European and US subscriptions must be made by cheque drawn on a UK bank or UK cash in a registered letter. If you want to order a magazine and none of the above rates apply to you, just email us. We'll give you a price. Atari Computing will also be available directly from authorised User groups and other outlets around the world:

#### GERMANY

Thorsten Butschke. Email: [Thorsten\\_Butschke@s.maus.de](mailto:Thorsten_Butschke@s.maus.de) (No emails >16K please)

#### OTHER

We're expecting to be able to announce local support for Scandinavia, Australasia and North America RSN!

#### ADVERTISERS

We have a limited number of pages set aside each issue. These are realistically priced to attract everyone in the Atari marketplace. To discuss your requirements please contact Mike Kerslake at the address above.

#### SUBMISSIONS

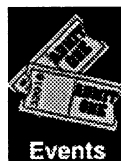
We're always on the lookout for talented new contributors so if you've got an idea for an article please do get in touch.

**DIGITAL ANTIC PROJECT:** another new Web page with a difference. Kevin Savetz is putting together a web site that will contain the entire text (as well as illustrations and interesting

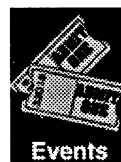
ads) from all issues of ANTIC, the 1980s magazine for the 8-bit Atari user. The first two issues have been placed on the Web site, and Kevin is looking for interested people who can help the project by scanning, HTMLing, and proofreading the magazines. Kevin (who has gotten the blessing of ANTIC's former publisher to go ahead with the project) also hopes that he will be able to add material from its sister magazine, STart. The fruits of his labors can be seen at <http://www.northcoast.com/savetz/antic/dap.html>. Interested in contributing to the project? Get in touch with Kevin at [savetz@northcoast.com](mailto:savetz@northcoast.com)

#### HOUSTON ATARI SAFARI #7

**PLANNED:** the 7th annual Houston Atari Safari, the popular show for Atari vendors to show off their wares and introduce new products, has been scheduled for February 22nd, 1997, at the Four Points Hotel, 7611 Katy Freeway, in Houston, Texas. Interested dealers and other exhibitors should get in touch with show organizers at Houston Atari Computer Enthusiasts, PO Box 820335, Houston, Texas, USA, 77282-0335 for more information.



Events



Events

**TAF FLEA MARKET COMING!** Toronto Atari Federation (TAF) has announced the scheduling of their annual and very popular Flea Market, where many bargains may be had in used hardware and software. The event will be held on November 17th, 1996 in the North York City Centre, 5110 Yonge Street, Toronto, Ontario, Canada. Further info on the event (including reserving tables for



interested resellers or vendors) can be obtained from Toronto Atari Federation, 5334 Yonge St Suite 1527, Willowdale ON, Canada, M2N 6M2 or by e-mail to: [hcarson@io.org](mailto:hcarson@io.org) -or- [lianne@io.org](mailto:lianne@io.org). Hope to see you there.



#### NEW MAGIC, MAGICMAC, EASE!

Applications Systems Heidelberg (ASH) has recently announced some exciting and significant new upgrades to some of their best-selling and innovative products. Here's what's new:

(27 June 1996, Edmonton):

Applications Systems Heidelberg has announced some of the new features that will be included in MagiC 5, MagiC Mac 2, and Ease 5, to be released later this year.

V5 of the popular operating system will coincide with the release of MagiCPC—the MagiC operating system for machines running Microsoft Windows 95.

"Probably the most important aspect of these upgrades from the current MagiC user's perspective is the inclusion of long filename support," says Jon Brenda of Computer Direct. "However, these announcements will mean much more for everybody currently using the Atari platform, it means that there will be a future, not only for the machines in use now, but for nearly any machine that Atari software users will ever own. What this means is that the Atari software consumer needn't worry about buying new software today, and having it become useless to them next year."

"This operating system, with its long filenames, threads and signals, as well as all the features that current MagiC users are already enjoying, is more than just a competitor to the Macintosh and Windows 95 systems." Brenda boasted: "It will blow them away." The MagiC operating system running on dedicated hardware is unparalleled for its code efficiency, and according to Brenda has many features not found in the mainstream Macintosh and Windows 95 systems.

"The fact that it is a true pre-emptive multitasker with interprocess communications like pipes and shared memory already puts MagiC ahead of the mainstream systems. We are already starting to see many major software packages being updated to take full advantage of MagiC."

Leslie Hartmeier, Vice President of the Edmonton Atari Computer Hobbyists, focused on the new 126 program limit and the long filename support when asked for his opinion of what the new features will mean to him.

"Basically I will be happier with being able to name

files 'Falcon\_software\_compatibility\_list.html' instead of 'fscompl.htm' and trying to guess what it means! As 32-Bit Librarian for the club it will also be nice to have the new upper limit on processes while I'm testing new software. I'm pretty sure that I've come close to the previous limit on a number of occasions."

Another anticipated side effect of the new versions of MagiC is that the platform will get a boost.

"We used to be dependent only on Atari for our hardware, but now the OS has a chance to actually grow again. We expect quite a few ex-users to return to the platform now, especially when they see the quality of software available for the Atari," said Brenda.

MagiC 4 and Ease 4 are currently imported, supported, and distributed in North America by Computer Direct of Edmonton, and will have easy upgrade paths to the new versions. Current upgrade information will be available on Computer Direct's World Wide Web site at <http://www.compdirect.com>

**Computer Direct**  
Canada's Atari Specialists!

**Toad Computers**

America's  
Atari Source!



#### MAGIC-MAC 2.0

MagiCMac 2.0 comprises the operating system kernel of MagiC 5.0, which allows all extensions of MagiC 5.0 to be made usable under MagiCMac (e.g.: Windows95 file system on disks, AHDI drives, threads, and signals).

MagiCMac 2.0 supports ST Low (320x200 with 16 colours) and ST Medium (640x200 with 4 colours) in addition to the Mac screen resolutions. Programs that require these resolutions will now be more likely to run.

In the same way the ST High emulation (640x400 monochrome) has been optimised: All three ST resolutions now use PowerMac native routines, so that the system can now control and adjust the monochrome resolution via a monitor control field (on all PCI Macs), thereby allowing essentially fluid operation.

MagiCMac is now better integrated with the Mac OS. You can, using a special dialog, set what Mac file type shall receive certain MagiC-Mac generated files. It can be set so that the Papillon .TIF file that you saved will appear in the Finder as a Photoshop TIFF file. Then, a double click on this file in the Finder will automatically start Photoshop.

#### What's New?

A small, refined accessory runs in the background and takes care of the communication between MagiCMac and the Mac OS. If you double click on an Atari application in the Finder, this application will be started under MagiCMac.

Also, system reports of the Macs are now also understood by the called accessory. For example, if a Mac screen returns a screen redraw, MagiCMac will also redraw its screen contents.

For owners of the WACOM Artpads with the ADB connectors, the mouse modes can now be switched to 'Absolute', making the use of graphic tablets possible.

Often desired, now implemented: the integration of CD-ROMs have been simplified. Previously, every CD had to be installed as a separate drive. Now the CD-ROM drive itself can be employed as a MagiC drive so that drive G (for example) will always be the current inserted CD. In addition, you can assign a MagiCMac drive for the Mac removable drive and detect what format of media is inserted.

Further Innovations: On PowerMacs, virtual memory may now be activated for Mac programs. The archive bits are now supported, as allowed by the Backup programs. On WindowsNT and Novell Server drives the table contents are now correctly displayed thanks to new switches in the Drives dialogue. The number of partitions reserved for a removable drive is now adjustable. The creation and use of symbols ('Aliases' on the Mac) is now possible on the Macintosh partitions under MagiCMac.

#### ASH EASE 5.0

EASE is now up to version 5.0, and at last uses long



## What's New?

filenames in a regular TOS environment! Specifically for users of MagiC 5.0, MagiCMac and MagiCPC the report options for a directory window can now be configured without having to detour over the menubar. With the so-called Autolocator function, you can type in the initial letters of a file in a directory window, and choose a file in a more convenient manner.

One additional little utility allows you to generate program and file groups so that you can have the most frequently used programs and documents at hand. The groups can be put on the desktop as icons, ready for use at any time. Finding files using the extended search function is now child's play. All files found are now listed in a separate window.

Additional accessories may now be installed after MagiC simply by double clicking on them.



**NEW VERSION OF OUTSIDE:** Are you a user of Outside, the program that allows Falcon, TT and PAK/68 modified STs to utilize up to 500 megabytes of virtual memory via your hard drive? You'll be pleased to know that version 3.40 has just been released. The program, which is now represented in North America by Edmonton's Computer Direct, retails for \$59.99 US - \$79.99 Canadian.



**WILLY'S ADVENTURES:** New Beat Development, a software company in Europe, is currently putting finishing touches on a new Falcon-only game. Called WILLY'S ADVENTURES, the game is

highly reminiscent of the recent RAYMAN for the Jaguar, with a digital soundtrack and beautifully detailed graphics. You can download a demo of a special level at <http://www.kuai.se/~dhedberg>.

**GENERIC STOS FIXER:** Do you still have programs from your ST that were programmed in STOS Basic, and won't run on your Falcon? Anthony Jacques, writer of the famous BACKWARDS ST emulator for the Falcon, has coded Generic STOS Fixer (GENFIXER), a utility that recodes STOS programs to run on a variety of ST/e, MegaSTe, and Falcon030 TOS versions (Anthony also is looking at possibly adding TT030 support). One interesting side effect has been the discovery that STOS programs GENFIX'ed for TOS 2.06 will now run under GEMulator '95. The program is freeware, but Anthony would certainly welcome contributions for his hard work. I've already GENFIX'ed the popular OZONE game and it runs great on my Falcon. You can get in touch with Anthony at [jacquesa@cs.man.ac.uk](mailto:jacquesa@cs.man.ac.uk), or <http://www.cs.man.ac.uk/~jacquesa/>. The file itself should be available on your favorite BBS or ftp site, or on ST FORMAT Cover Disk #83.



**Remember – if you have news, concerns, or events, drop me a line at 'dreibel@io.org'.**

**And remember: "Those who cherish freedom do not need to flame those who don't; we can though, through questions and logic, help them to self-immolate." –Chris Bolton, found on alt.religion.mormon.▲**

what's hot

what's hot

what's hot

what's hot

# STOP!!

**Before you do anything else!  
CHECK THE MAILING LABEL  
ON YOUR CURRENT NOTES  
ENVELOPE!**

**Don't throw that sucker out!**

**The upper right corner of your mailing label shows the month and year your Current Notes subscription expires. We want you to know this information so that you'll renew in a timely manner.**

**There are terrific prizes being offered to some lucky renewing subscriber:**

**1 - you could win a date with our publisher Robert Boardman. He'll even shave his legs and put a bag over his head for the occasion! He also promises to stay away from all forms of red wine (and thereby avoid throwing up on you).**

**- or if you prefer -**

**2 - choose a date with Wanda (she works a corner about a block from our offices). She's a fine looking brunette and will be accompanied by her, uh, manager, Louie. Wanda and Louie will ensure that your evening is filled with, um, activity.**

**- or, better yet -**

**3 - you could wind up with a free subscription! As a matter of fact, of all the prizes we're offering, this is the one you've got the best chance of winning!**

**Remember:  
Current Notes  
Readers are Happy  
Readers!**

## DAN'S LIST OF

# NEW! ESSENTIAL WEB SITES! NEW!

After having fun with the Cool Web Sites over the past couple of issues, I thought it was time to list some of the more serious Atari-related sites to bookmark in your Web browser (all the sites have been tested and are compatible with STIK/CAB v1.31)

### TOAD COMPUTERS WEB SITE

**<http://www.toad.net>** – TOAD Computers really needs no introduction or explanation, but their Web site – whew! Crammed full of info on the products they carry, including illustrations. Also includes jump-off points to a variety of other sites of interest.

### COMPUTER DIRECT <http://www.compdirect.com>

– Computer Direct is another major Atari software/hardware house. Their Web page is most impressive, with detailed rundowns of what they carry and manufacture. Very well-designed.

### UNIVERSITY OF MICHIGAN WEB SITE

**<http://www.umich.edu/~archive>** – the popular site in the US to download Atari-related files. The place is huge. Unlike their ftp sites, you're not restricted to logging on at certain times.

### MOUNTAIN SOFTWARE

**<http://www.pacifier.com/~awatson>** – Anthony Watson recently announced that he won't be doing further development for TOS users on his innovative software (Recipe Box, Mountain Reader). He's still offering his programs for sale, as well as supporting registered users of his products. He's also developing Windows '95 versions of his software (Recipe Box has just come out). You can download demos from his web site, as well as recipes.

### FRAN'S ATARI LONG LIST 'O LINKS!

**<http://www.ior.com/~fkeylard/links.htm>** – a ridiculously HUGE number of links from around the world relating to Atari users.

### HENSA:

**<http://micros.hensa.ac.uk/micros/atari.html>** – huge repository of Atari-related files, with detailed info on each file and what it does. Note that the site can only be accessed between 8PM-8AM GMT if you're not a student at the University of Lancaster.

### GRIBNIF:

**<http://www.mtholyoke.edu/~dwilga/gribnif.htm>** – Gribnif Software. Includes all the latest patch programs for Geneva, Neodesk, Stalker, STeno, and CardFile for downloading. Now if only chocolate was uploadable!

### TITAN DESIGNS/BLACK SCORPION -

**<http://ourworld.compuserve.com/homepages/TITANWEB/>** – information on APEX Media, Expose, and the Nemesis and AfterBurner040 Falcon accelerator boards.

### HOMA SYSTEMS HOUSE

**<http://www2.magmacom.com/~nima/>** – distributors of the HOMA CD driver software for

popular PC CD-ROMs, as well as Photoline and the NOVA graphics cards for the MegaSTe, TT030 and Falcon030.

**STOSSER** <http://www.airtime.co.uk/users/stosser/> – Tony Greenwood's page, the publisher of the STOSSER disk magazine for STOS programmers and developers, and no slouch at programming in STOS himself (remember H.E.R.O.?).

### ATARI PHILE HOME PAGE

**<http://www.walusoft.co.uk/fff/home.htm>** – former home of the Falcon FacTT File. Site recently expanded to include info on ALL STs. Includes highlights from their latest disk magazines.

### TAF HOME PAGE <http://www.io.org/~schrst/taf.html>

– maintained by Stephen Christian, it provides all the latest news and the mandate of the Toronto Atari Federation, the largest Atari/TOS/GEM club in North America.

### ATARI ON THE WEB!

**<http://www.mcc.ac.uk/~dlms/atari.html>** – another large repository of Atari information. It's maintained by Mark Smith in the UK. Well worth the trip.

### FAST CLUB HOME PAGE

**<http://www.compulink.co.uk/~sta/>** – publishers of programs like ImageCopy, Fonty and TexSTyle, Paul Glover's FaST Club also maintains a large PD/Shareware Library and produces ST Applications magazine.

### COMPUTER DUNGEON

**<http://www.mcs.net/~isis/dungeon/dungeon.htm>** – Al Horton operates the Illinois-based Computer Dungeon, purveyors of new and used Atari software and hardware. Al has a huge inventory of stuff, from the oldest to the very latest. His print catalogs are absolutely terrific. Order one!

**L.A.P.D.** <http://www.lapd.demon.co.uk/> – considered one of the best UK-based PD/Shareware Libraries. Their web pages are very well designed and offer a number of jump-off links to other sites.

### FLOPPYSHOP

**<http://www.netkonect.net/tachyon/floppshop/>** – PD/Licenceware Library, based in Scotland. The publishers of Positive Image and Family Roots 2.

### MAGICMAC PAGE

**<http://users.aol.com/zan660/mhome.htm>** – unofficial web site dedicated to helping users of MagicMac set up their systems easily and efficiently.

### CURRENT NOTES:

**<http://www.io.org/~hcarson/cnpage.htm>** – shameless plug (Ed. Note: It's a great site with ALL of the links listed in Dan's Cool Web Sites and, now, Dan's Essential Web Sites!

**YAHOO!** <http://www.yahoo.com> – need to search for a topic on the web from time to time? Don't always have an address handy? Punch in a key word and immediately come up with pages of related URLs. Highly recommended as a road map.

**ALTA VISTA** <http://www.altavista.digital.com> – another essential roadmap, AltaVista (maintained by Digital Corp) has the advantage of pulling up URLs even Yahoo doesn't have. Extremely fast.▲





# Systems For Tomorrow

## SUMMER SPECIALS!!!

Prices good thru September 15th 1996, while supplies last.

### TOS Software

#### 3D Construction Kit \$19.99

Powerful Virtual Reality design kit. You can design your own dream house, then drive or fly around it! 1MB ST/STe

#### Amberstar \$19.99

Innovative fantasy role playing game. Features over 150 maps, both birds eye, and 3D dungeons and cities. Over 90 Spells, automapper, Hard Disk installable and more.. 1MB ST/STe.

#### Ancient Art of War in the Skies \$19.99

Take full control of all WWI air forces in this thrilling wargame that combines tough strategies with fast action! 1MB ST/STe/TT/Falcon. Hard Disk Installable.



#### Hard Disk Sentry \$29.99

Probably the most reliable Hard Disk Optimizer and Repair program available! Now supported by chroMAGIC Software. Now includes a special TTP version, for unattended, batch operation. Compatible with all TOS Computers (ST->Falcon)

#### Jack Nicklaus Golf \$9.99

Tee off on the most challenging 18 holes of major championship golf with the legend who hand-picked each one - Jack Nicklaus. ST/STe

#### KSpread 4 Lite \$19.99

Advanced spreadsheet for the Atari ST series combining ease of use with a comprehensive range of features. Includes over 100 functions.

#### Legends of Valour \$19.99

From your first moments in the streets of Mitterdorf, you'll find action, combat, romance, and glory in this 3D fantasy role playing adventure. 1MB ST/STe.

### MAGE

**\$29.99**

Majic Arcade Graphics Engine is an incredibly powerful developers toolkit for creating your own commercial quality games. Includes GFA Basic 3.5E. ST/STe/Falcon.

### PhotoShow

**\$9.99**

PhotoCD image viewing software, also creates custom Slide Shows and Presentations. Falcon Only.

### Populous II

**\$19.99**

Battle 32 of Zeus' most powerful deities to earn you seat among the gods! This is the MUST HAVE god game! 1MB ST/STe.

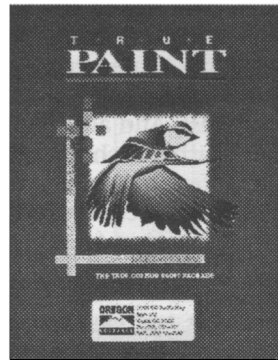
### Rock N Roll Clams \$9.99

Help Casper Clam and Band shake, rattle and roll their way from the Bottom of the Ocean to the Top of the Charts! Great platform game! 1MB ST/STe/Falcon. Hard Disk Installable. Power Pad Compatible, but not required.

### Seurat 3.0

**\$29.99**

With over 400+ commands, functions and operations, Seurat is among the most full-featured of Atari graphics programs! ST/STe/TT/Falcon. Also includes TrueSeurat for use in TrueColor on the Falcon.



### True Paint

**\$19.99**

Flexible GEM Based Paint Program! Supports all Atari 680x0 computers with at least 1MB of RAM, and supports all resolutions from Monochrome to True Color. Includes a healthy array of Painting tools, and supports many Graphics Formats!

### VIDIchrome ST

**\$9.99**

When used with VIDI ST, will allow 512 color pictures (4096 on STe) to be captured. Includes Software and filters!

### Walz

**\$9.99**

Cool Breakout style game for the ST/STe/TT/Falcon030. Easy to Play! Difficult to master! Impossible to quit!

### TOS Hardware



#### ColorBurst Scanner \$199

Full Color Hand Scanner for the Falcon030. Scan in 262,144 colors, 4096 colors, 64 greyscales, or monochrome. Includes Migraph OCR jr.

#### Mouse Master

**\$9.99**

Save Wear and Tear on your joystick ports! Just connect this box to your Joystick and Mouse ports, and then plug in two joysticks and a mouse, allows on the fly switching between your Mouse and a Joystick!

#### RAM Gizmo /w 14MB

**\$49  
\$199**

A 14MB RAM upgrade is the Must have upgrade for Falcon030 Owners! Opens up the worlds of multitasking, DTP, art and animation, and more...

### JAGUAR

#### Double Dragon V

**\$19.99**

#### Dragon: Bruce Lee

**\$19.99**

#### Fight For Life

**\$54.99**

#### Iron Soldier

**\$19.99**

#### Pinball Fantasies

**\$19.99**

#### Primal Rage CD

**\$54.99**

#### Troy Aikman

**\$19.99**

Toll Free - Orders Only **800-875-4943**  
Local & Information **816-833-4738**

Retail 11006 E Winner Rd - Independence MO 64052  
Mail Order PO Box 3034 - Independence MO 64055  
FAX 816-252-3611  
E-Mail [sft@sound.net](mailto:sft@sound.net)

Hours  
Tu-F Noon-6PM (central)  
Sat 10AM-6PM

Prices subject to change without notice.

second third fourth  
The first in a series on PIM's for TOS/GEM users

# Personal Info Harlekin? InTouch? Management DaCapo? WE NEED CalAppt? HELP CardFile?



**Current Notes' Tech Support genius Steven Burris has a practical look at InTouch. It's one of a newer breed of PIMs, and it's real nice . . .**

***It's nice to belong to a group, I think; the group of Current Notes PIMs reviewers. In this fourth installment in the series, I've been delegated the task of delving into the intricacies of InTouch. Canadian, eh?***

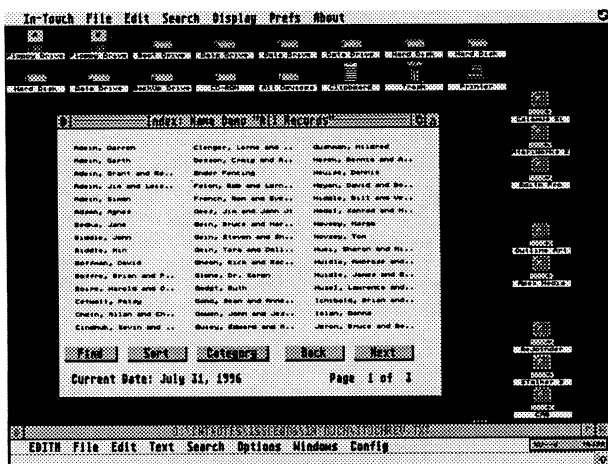
Yes it is - homegrown, written by Lorne White and distributed by Computer Direct (although you should be able to buy it almost anywhere soon). It's kind of a licenceware thing; you pay Computer Direct a fee to register the software. I am a problem (or at least my work habits pose problems)! I need to be organized, but I'm not. InTouch is one of a group of smallish utilities/apps which I now find indispensable. It multitasks brilliantly under MagiC, Geneva and MiNT (I use all three extensively), provides appointment reminders, date flags, fast & easy access to a variety of different databases full of important

information about my business contacts, personal contacts and family contacts.

As the screenshots reveal, the InTouch interface is somewhat unassuming. But the straightforward approach does not in any way diminish the speed or power of this PIM. Searches, Calendar calculations, Database loading, and Saving are all lightning fast. And although early versions (with which you may already be familiar) suffered from some 'stability teething problems', the current version (v2.11) is apparently rock-solid.

Atari/TOS/GEM PIMs seem to have developed certain common features, one of the best of which is the so-called bootstrap reminder; it's linked to the Date Book part of InTouch so that each time you launch the program it can be set to notify you about impending appointments, or reminders about certain activities.

Because my business life tends to operate in phases I often find myself accessing one particular address & phone database for weeks on end, to the almost complete exclusion of all the others. InTouch accommodates



InTouch has a lot to recommend it, not the least of which is an uncluttered interface. Full 3D and other enhancements are coming mind you.

that situation by providing a setting which will cause a specified database to be loaded automatically each time the program is launched. One of the nice InTouch 'Drag-'n-Drop' features permits dragging individual events from the listing on the right side of the Calendar onto different dates; it makes rescheduling extremely easy.

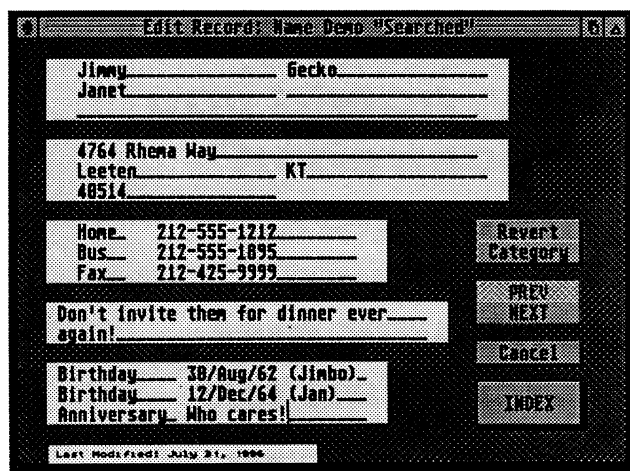
The most important thing I needed to do for this review was convert one of my existing CardFile 4 databases for use with InTouch. The InTouch software accomplished the conversion almost instantly and I could find no flaws with the conversion. InTouch will also import Tab or Comma delimited ASCII files.

What does it all boil down to? InTouch is stable on a wide variety of TOS versions (although it choked on the Mega 8 ST/FasTurbo 50MHz combination which commonly gives problems to a lot of software!) from TOS 1.04 to 4.04 and from MagiC and Geneva to MiNT. It prints calendars, appointments, name lists, labels and envelopes, and yells at you when something important is about to happen. Please note that InTouch requires either NVDI or SpeedoGDOS in order to do any printing. My only quibble with InTouch was with its limited space to add notes to the database entries. There were a couple of other 'glitches' which I won't mention because they turned out to be non-events (I blundered around in the program for a full day before reading the manual!).

You'll be glad to know that InTouch is in the midst of extremely active development. It's being updated with a full 3D look using the latest GEM 2 libraries. Extensive drag-'n-drop is being implemented, along with complete client tracking, client history and a much larger 'Notes' section for better evaluation and long-term data recording. Last but not least, full contact management facilities are being built into the software. It's good now, and when the new version is released in the Fall, it will likely be the best thing on the market. But now upgrade later - it's cheaper!

Call Computer Direct toll-free at 1-800-547-9203 for more information or to order your copy of InTouch.

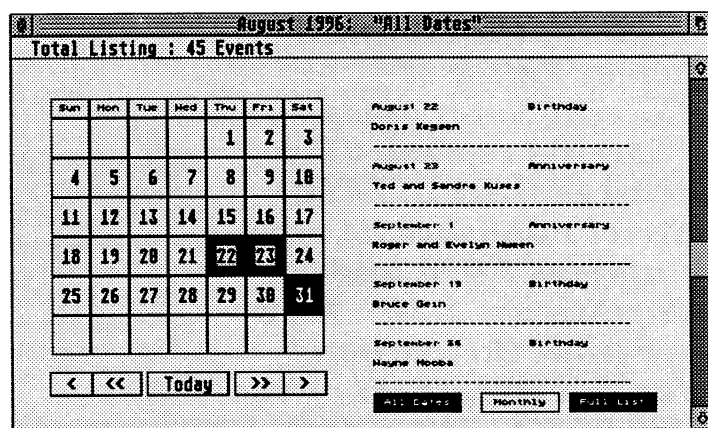
The latest version of InTouch is always available from the Computer Direct Web Site at <http://www.compdirect.com>. You can also reach the web site from Current Notes' Home Page (see the box below).▲



Screenshot of the 'Edit Record: Name Dena "Searched"' window in InTouch. The form contains the following fields:

- Name: Jimmy Janet, Gecko
- Address: 4764 Rhema Way, Leeten, 48514, KT
- Phone: Home 212-555-1212, Bus 212-555-1895, Fax 212-425-9999
- Buttons: Revert, Category, PREV, NEXT, Cancel, INDEX
- Notes: Don't invite them for dinner ever again!
- Birthdays: Birthday 38/Aug/62 (Jimbo), Birthday 12/Dec/64 (Jan), Anniversary Who cares!
- Footer: Last Modified: July 31, 1996

You can use any of the sample templates supplied with InTouch or you can roll-your-own. Either way, InTouch provides an interface which allows fast, intuitive data entry. In the field configuration dialog box (not shown), there are slots provided for a lot more fields. If the notes area is expanded, this program will be a rival to anything currently available for TOS/GEM machines.



Screenshot of the 'August 1996: "All Dates"' window in InTouch. It shows a calendar grid and a list of events.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Events listed on the right:

- August 22: Birthday, Doris Kegen
- August 23: Anniversary, Ted and Sandra Kues
- September 1: Anniversary, Roger and Evelyn Nosen
- September 13: Birthday, Bruce Dein
- September 26: Birthday, Wayne Hobbs

Buttons: < << Today >> >

Buttons: All Dates, Monthly, Full List

The strength of most PIMs lies in their calendar, appointment and scheduling capabilities. Harlekin is still tops, but InTouch is catching up rapidly. The next major upgrade to InTouch (coming this Fall), will likely blow the doors off the competition and turn InTouch into a top-notch, full featured Contact Manager.

**The Current Notes web pages at: <http://www.io.org/~hcarson/cnpage.htm> has links to Danny Bhabuta's pages and a lot of other great URLs. The Current Notes pages are CAB friendly too . . . and have links to all the major web search engines (Yahoo, etc.).**



**How do you resist the temptation when someone comes along and says: like a copy of It's new, original disks, manual, and released it late yeah . . . it's only \$39.95US from just about any dealer."**



### **Forty Bucks? That's It?**

**"How would you like to do a review of the new version of PageStream 2.2SE?", the esteemed Senior Editor of Current Notes asked. "Sure!" I replied. "I've tried DeskSet II, Fleet Street Publisher III, Calamus 1.09n and PageStream 2.2US. Let's see what they've done for this release. At \$39.95 U.S., it's a deal that looks hard to beat." Howard then handed me the review package he'd received from SoftLogik.**

PageStream is a mid-level desktop publishing program that is very easy to use. It incorporates typographical features such as page layout, pictures within documents, scalable fonts and text flow around irregularly shaped objects. It's also a word processor featuring spell checking, search and replace by attributes and the standard cut and paste functions. PGS really is a solid, intuitive DTP

program. The main strength of PageStream is it's ability to manipulate text and graphics as objects. An object can be resized, skewed, slanted, rotated stretched and twisted. You can manipulate an object in many ways and all can be combined with each other. This allows for a heck of a lot of creativity when creating a page.

### **What Do You Get?**

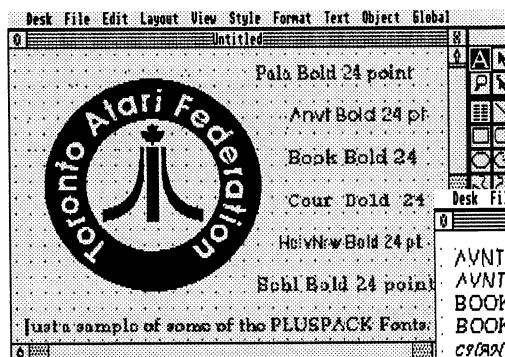
PageStream 2.2 SE is supplied on 5 Disks along with a 108 page Manual complete with Command Reference, Appendices and white pages and is a nice piece of work. Only 50 pages are actually dedicated to getting you up and operational however, and since the manual was written to cover both Amiga

and Atari computers, you will find numerous references to the other platform. The literature mentions PageStream 3 for Amiga, Macintosh and Windows, but it looks like 2.2 SE is the last Atari version to be made available from SoftLogik.

The screen can be viewed in any magnification from 15% to 1500% with the preset values of actual size, 50%, 200% and full page. It's great for checking out fine details and determining how your document will look when it's printed.

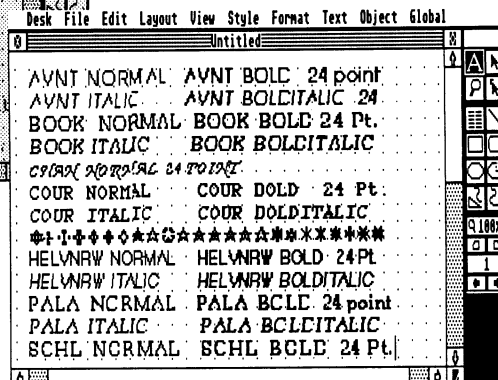
### **Getting Started!**

Installation on a hard drive is not that complicated. Simply follow the directions in the manual. However, if you don't

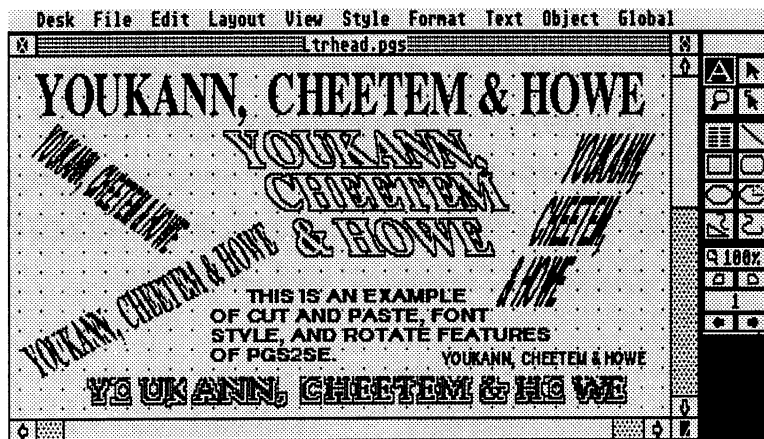


**Pagestream has all the usual layout features, as well as . . .**

**access to literally thousands of fonts . . .**







have a hard drive and have the time, you can run PGS2SE from the supplied floppies, be prepared for a lot of disk swapping. It can be done effectively (I've actually tried it).

After the files are installed, launch the program. Double click on PGS2 and lo and behold, you are presented with PageStream, ready to be configured.

The manual is pretty good in this respect and it should not pose problems for the novice user. You have to tell the program what printer to use but there are printer drivers for pretty well everything out there including Postscript drivers. I've produced good looking documents on both my 9-Pin(!) and SLM804.

You should also tell PGS2SE where to find your FONTS. The Bonus with the 2.2 SE package is the PlusPack font package which consists of seven fonts previously unavailable with any release of PageStream. One little tip I can offer is that the last selection in your fonts manager should be \PGS\FONTS\\*. This will tell FONTLIST where all your fonts reside and PGS will then look inside any folders it finds in there..

You must also tell PGS2SE what paths to use, etc., etc. If you like, you can even override some of the settings for bringing in text and graphics. SAVE these settings! This creates the new PGS2.INF file that is needed for the next time you boot into the program.

### Have Some Fun!

When you start creating a document, you are presented with a variety of options for size. Hit return and use the defaults to get going. The page is created with the Menu Bar to the right. Select the Text Tool (A) then choose a Font (from the menu bar) and type away. Once you have selected a standard font (for body text), you should

save the settings again. Otherwise you will have to select the font each time you run PGS2SE.

Follow the guidelines in the manual and you can create newsletters, posters, flyers or any number of other things that a good DTP program will allow. A friend (a complete DTP novice!), recently purchased the program and has been having a ball creating notices and such for his service organization. He has even mastered the drawing options of PGS2SE that I've never had the time to get into.

There are literally thousands of fonts available for use with PageStream through User Groups, downloads from various BBS's, ftp sites, commercial on-line services, and CD-ROMs. There are literally hundreds of thousands of IMG and other graphics files available from the same sources, and PageStream imports most of them. You can create cartoons and even draw your own things using the line, circle and other tools available within PageStream. If you have a Scanner, you can scan the image into a

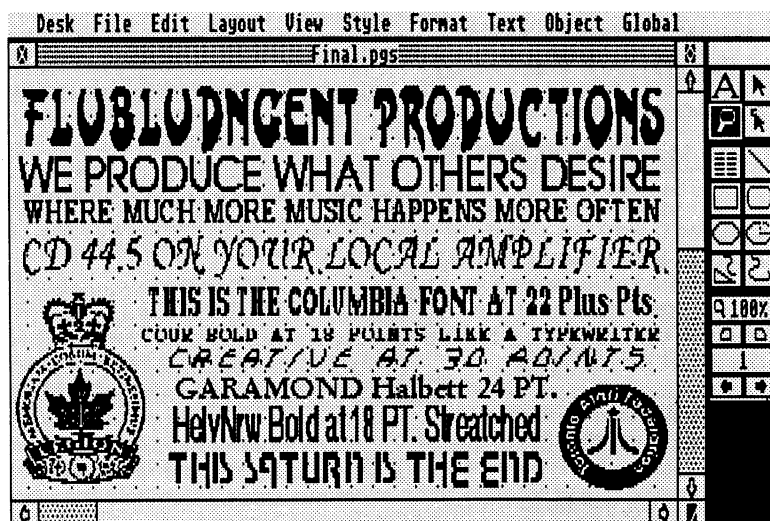
format that PageStream can use, then import it into your document, rotate it, skew it, do whatever with it, and then print it. It works! Have fun!

In a comparison of the SE version against the US version, I've noticed a minor defect/bug in the Font Manager screen (which is called when selecting another font). The word CANCEL is drawn twice at the bottom of the screen; not a big thing, but definitely a cosmetic problem. On the other hand, the Global Change screen works on the SE version, but not on the US version!

I admire the program. It's very versatile, works on a Atari color (SC1224, SC1435) system, etc., etc. It should be noted that there are tips and tricks missing from the shortened manual. I believe that SoftLogik should include a text file (a README in the Text Folder?) which explains things just a little more clearly. If that requires another floppy disk, so be it; it's got to be cheaper than reproducing the original PGS 2.1 manual. Would I recommend purchasing PageStream 2.2SE? I already have! At \$39.95 U.S., it's a heck of a deal. The PlusPack Fonts alone are worth at least \$19.95 (even if you already have PageStream).

**EQUIPMENT USED IN THIS REVIEW**  
Atari 4160 STe with TOS 1.60, Seagate 690 MB SCSI HDD, Atari SC 1435 Color Monitor, Star NX-10 9-Pin Printer, Atari SLM804 Laser Printer

Dave Lee is a l-o-n-g-t-i-m-e TOS/GEM user, the Sysop of the Toronto Atari Federation BBS, and a regular participant on the Current Notes product testing panel.▲





## **Multimedia applications for the Falcon? Decent ones? You bet . . . and Lianne has a look at one of the most fascinating packages of all . . .**

***Rainbow II is a MULTIMEDIA program by Addiction Software. And where have we heard that WORD before, eh? Multimedia: what does that really mean? Sounds like just another drawing program that will do a little animation, doesn't it? Well don't let Rainbow II's unassuming manual fool you. The 14 page instruction booklet only touches the dust on the surface of the depth of this program. When I bought my Falcon, I was sure I was getting speed and some hard drive space, but I never dreamed I would be able to do the things I can do with Rainbow II.***

Rainbow II works as a series of studios. Think of it as a painting studio attached to a sound studio, which in turn is attached to a photo studio. At the end of the hall is the editing studio where you put the whole finished product together. All studios are accessible with a click on "Go To Another Studio" and doing so will not cause the loss of any of your work.

Our first visit will be to the

Picture Studio. As a drawing program it leaves a little to be desired. I guess that's why it's not really called a drawing program, although you could use it as such if you absolutely had to. It has no bezier curve function; if you've read any of my articles on drawing and art software you know how I feel about that! The sheer power of the picture manipulation tools overshadows any shortcomings this little beauty may have in the drawing department.

Rainbow II will load just about any file format, but it will only save in formats that support true colour. There are several predefined picture sizes you can choose from, and they are configurable with the 'x' and 'y' axes, from 3 to 9999 pixels. For any new session with Rainbow II, the fun begins after a picture size is selected.

Some of the wilder drawing features include a realistic airbrush that will lighten or darken the selected portion of the picture with a fully configurable spray size and speed. You can use it to feather out the edges of the picture, or masterfully blend in two or more colours. Want to do your best impression of an Impressionist? Realistic water colours and oil paints will stun you. Watching one brush stroke of the oil paint literally pull the colour of a previous brush stroke along with it is so amazing, I've caught myself staring at the monitor, mesmerized. Equally fascinating is watching the edges of the water colour brush strokes bleed as if the screen was wet. Configurable pen sizes and colour effects everywhere you click, will give you hours of fascination, not to mention some very impressive production.

With some imported or completed pictures you can scoot over to the Photo Studio for some further manipulation. Swap colour planes, roughen the pixelation or smooth it out, add some noise (in picture talk that's akin to adding static to music), add a little 'glamour' and make some of the colours shine, or emboss the whole thing

and really make it stand out. I wish I could reproduce some of these effects, for this article; it is impossible to explain the extent of the power of this program with just a few words. Of course in both studios you can affect the whole picture or individually selected sections (what would a program like this one be without cut and paste features?).

With original artwork firmly tucked under one arm, figuratively speaking, you can move over to the Sound Studio for some background voice-over and music. Original recording can be in mono or stereo, 8 or 16 bit and at sample rates anywhere from 6146 hertz to 49170 hertz. You can reprocess recorded sound, adding some echo, fading segments in or out, adding some noise or filtering out existing noise, affecting the recording as a whole or section by section. You can also move some sections around, editing along the way. When you're done, you can save the recording as an AVR file and move on to the next studio.

And what would any total presentation be without a Greeble to guide the viewer? Go around the corner to the Sprite Studio. It's not the easiest studio to master, but with a little work, it's possible to create full animations. The sprite studio provides the same drawing features as the picture studio and always displays three frames at a time so that you know exactly how the next frame must look to get a smooth animation. You can not only adjust a Greeble's facial features and limb movements, but his position on the monitor. The little tour guide Greeble is complete and he is ready to import into a presentation.

Well I did say multimedia in the beginning didn't I. What good would it all be if I didn't have the Slideshow Studio with which to put it all together? And it's so simple too. Pick the picture, pick the sound file, pick the sprite, pick the picture, pick the sound file, pick the sprite, repeat, etc. So long as all the files are in the same directory, you can match

them up as you see fit. When you're finished, click on 'play' and fall off the chair because you won't believe what a genius you've become in such a short time.

I have to be honest though. I am no Multimedia guru and it would take a lot longer to put together the kind of 'show' I've described. But it can be done, and it can be done with Rainbow II. I did put together a little slideshow with some of the AVR files that came with my Falcon (if you have a Falcon I'm sure you can just imagine what that was like), it worked just fine and Managing Editor Carson was most impressed (he hadn't read the article yet so he didn't know how easy it was!). I will leave the fancy sound and sprite stuff for someone else to pursue. I'm sticking with the Picture and Photo Studios. I really haven't had this much fun fooling around with my computer since I first got it.

It's only fair to mention a few of the drawbacks, even though I don't think they add up to much. As I said before, no

bezier curves. The cut and paste features are only definable in rectangles. You can not cut out irregular shapes and manipulate them. However, Rainbow II's really terrific zoom feature can be used to get around that. I also think the Developers & Authors have done a disservice with the manual. Yes everyone hates having to read pages of boring detail and the on screen tutorial is a great help, but there are many areas that I would like a step by step, walk-through. Sometimes it is necessary to understand how you are affecting a picture by detailed description and not just by visual confirmation. I also think it would be easier to think ahead if I had a complete understanding of what I was doing. I also have to wonder why no text features are included. I can't put my name to any of my work, and even the simplest of art programs allow you to use G-DOS or Speedo fonts. Maybe in Rainbow III(?)

There are some additional features that warrant mentioning which don't have as much to do with the usable features of the program as they do with

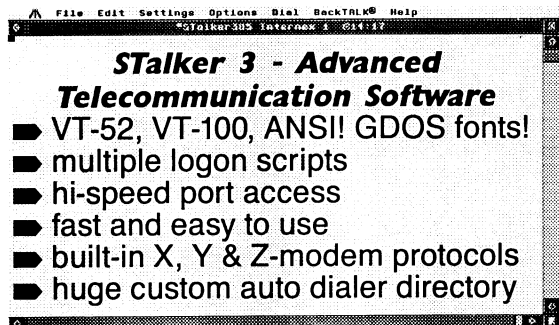
the comfort of the user. If you are not crazy about using a mouse and prefer the Tabby Tablet, fly at it! You can create your own pointer if Rainbow II arrow styles are not to your liking, and the desktop is completely configurable allowing you to place any menu choice anywhere on the desktop. You can change the size of the working window if you like, although that can have some interesting effects on the desktop, forcing you to scroll down two or three screens to get to the bottom.

Rainbow II is a wonderful piece of work. It is NOT a simple drawing program. If you own a Falcon, you owe it to yourself to try this software. It's all so easy to use!

Equipment used for this review:  
Atari Falcon 030 4MB/84MB hard drive, 14" SVGA monitor, NEC CD-ROM drive.▲

# Gribnif Software presents

## The Greatest Combo Ever!

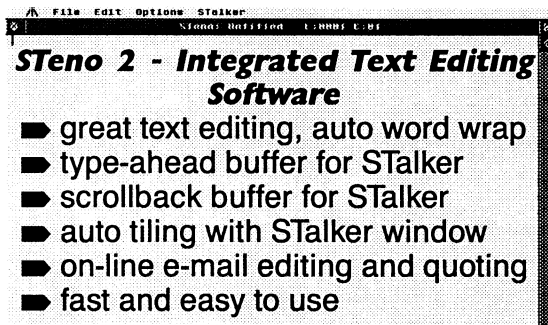


**STalker 3 - Advanced Telecommunication Software**

- VT-52, VT-100, ANSI! GDOS fonts!
- multiple logon scripts
- hi-speed port access
- fast and easy to use
- built-in X, Y & Z-modem protocols
- huge custom auto dialer directory

**STalker**  
v3.05

**STeno**  
v2.12

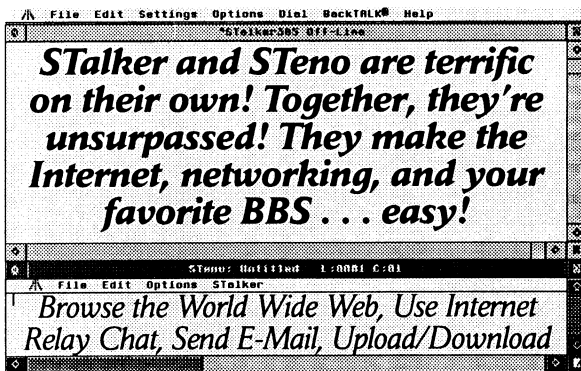


**STeno 2 - Integrated Text Editing Software**

- great text editing, auto word wrap
- type-ahead buffer for STalker
- scrollback buffer for STalker
- auto tiling with STalker window
- on-line e-mail editing and quoting
- fast and easy to use

Purchase STalker and STeno directly from Gribnif Software or any Atari dealer worldwide!

PH: (413) 532-2434  
e-mail:  
gribnif@genie.com



**STalker and STeno are terrific on their own! Together, they're unsurpassed! They make the Internet, networking, and your favorite BBS . . . easy!**

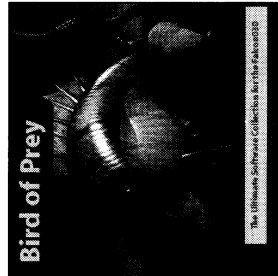
Browse the World Wide Web, Use Internet Relay Chat, Send E-Mail, Upload/Download

Gribnif Software  
PO Box 779,  
Northampton MA,  
01061-0779

FAX: (413) 532-2540  
e-mail:  
gribnif@genie.com

# The Future of Atari Computing is at TOAD!

## BIRD OF PREY: FALCON CD-ROM!



Floating Fish Studios, a Falcon-based recording studio, has created the definitive collection of software for the Atari Falcon030. Well organized and comprehensive, this disc includes files that are a "must-have" for any Falcon owner! Includes hundreds of utilities, applications, games, demos, graphics, music programs, online magazines, and more! You won't be disappointed! Prepared by Falcon lovers for Falcon lovers!

- Every Falcon Utility Known
- TOS 4.0x-Friendly Software
- Falcon Demos
- New Web Browser Package
- Falcon Games
- Sound Programs
- Software Demos
- Graphics Examples

**Bird of Prey CD-ROM . . . . . \$29.95**

More than 21,000 files  
for your Falcon030!

## THE ATARI COMPENDIUM CD-ROM

Authorized by Scott Sanders, this disc contains the entire Atari Compendium book (800+ pages), in easy-to-browse HTML format. Includes completely hyperlinked table of contents and index. An invaluable resource for Atari ST programmers.

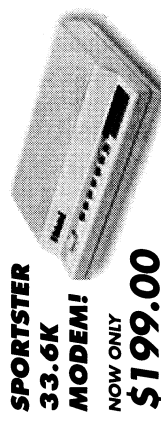
**Also includes 640MB of other files:**

- Linux/68K OS
- Jaguar AVI's
- MiNT
- Complete Web Browser Package
- Programming Languages
- ST, STE, TT, and Falcon Demos
- Most of the UMICH Atari Archive
- MagiCMac Demo
- GhostScript 3.33
- Commercial Software Demos
- Atari's Tempest 2000 (PC) Demo
- Portfolio Files

The ultimate guide to  
programming and more!

The Atari Compendium is the complete guide to programming the Atari ST. The rest of the disc is filled with PD software, shareware, demos, and pictures! **Contains 649MB in 7000+ files!**

**The Atari Compendium CD-ROM . . . . . \$29.95**



**SPORTSTER  
33.6K  
MODEM!**

**NOW ONLY  
\$199.00**

- US Robotics 33.6Kbps Sportster (Class 1 & 2) . . . . . \$199.00
- US Robotics ISDN Modems . . . . . Call
- Supra 144 Express External (Class 1) . . . . . \$99.00
- Supra 288 Express External (Class 1) . . . . . \$149.00
- SupraFX Modem 288 External (Class 1 & 2) . . . . . \$199.00
- Straight FAX (Latest Version) . . . . . \$69.95
- ST Modem Cable . . . . . \$9.00
- AT/Mega STE/TT030/Falcon030 Modem Cable . . . . . \$9.00

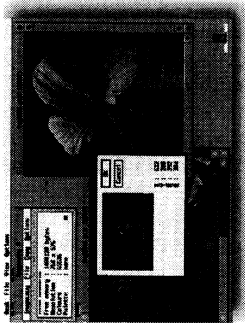
### HARDWARE UPGRADES & PARTS

- XTRA RAM Deluxe . . . . . \$79.95
- XTRA RAM 2MB . . . . . \$119.95
- XTRA RAM 4MB . . . . . \$179.95
- Falcon 16MB . . . . . \$349.00
- AUX TT RAM Board . . . . . \$199.00
- Desktop Case . . . . . \$199.00
- Lighthouse Tower . . . . . \$399.00
- High Speed Serial . . . . . \$59.95
- High Density FD Kit . . . . . \$99.95
- PAK 68/3 Board from . . . . . \$199.00
- T28/36 68K (NEW) . . . . . \$99.00
- 1040ST/STE Keyboard . . . . . \$99.00
- Mega STE Keyboard . . . . . \$129.00
- Mega STE Board . . . . . \$199.00
- NOVA Video Cards . . . . . Call
- External 720K Drive . . . . . \$159.00
- Keyskins . . . . . \$21.00
- TOS 1.4 or 2.06 . . . . . \$59.00
- Compatibility Plus . . . . . \$89.00
- DEKA 2 PC Kid Int. . . . . \$89.00
- Clock Cartridge . . . . . \$29.00
- Falcon PowerUp2 . . . . . \$99.00
- Replacement Floppy . . . . . \$59.00
- Original STE Floppy . . . . . \$99.00
- ST Power Supply . . . . . \$69.00
- ICD ASpeed ST . . . . . \$179.00
- ICD ASpeed STE . . . . . \$199.00
- ST Chips . . . . . Call

## ImageCopy 4.0CD

If you want to capture, view, convert, or print images on your Atari computer then you need ImageCopy 4.0CD. All major image file formats are supported including Photo CD, and images can be printed in monochrome or color on all popular printers: 9 and 24 pin dot matrix, laser, and even inkjet printers such as the 720 dpi Epson Stylus Color and the HP Deskjet 855C. Two of the major new features in version 4 of ImageCopy are Page Layout and Catalog. The Page Layout facility allows multiple images to be arranged on a page with the mouse or by typing coordinates. Individual images have their own color settings, and can be freely moved and resized (just like in a DTP program). This option can also be used to do color DTP by overprinting output from a monochrome publishing program!

**ImageCopy 4.0CD (ST, TT, Falcon, MagiCMac) . . . . . \$49.95**  
**3.5 to 4.0CD Upgrade . . . . . \$15.00**



### "MUST HAVE" SOFTWARE!

- MagiC4 . . . . . \$99.95
- Genulator Gold CD . . . . . \$49.95
- Genulator Board . . . . . \$99.00
- EASE 4 . . . . . \$69.95
- PC X-Former 3.5 CD . . . . . \$49.95
- Diamond Edge 2 . . . . . \$47.00
- NOBOLD . . . . . \$69.95
- Squirrel Zip Utilities . . . . . \$34.00
- HD Driver . . . . . \$39.95
- M. Beacon Typing . . . . . \$39.95
- Math Blaster . . . . . \$29.00
- Art for Kids . . . . . \$59.00
- Mixed-Up M. Goose . . . . . \$19.95
- Black Cauldron . . . . . \$19.95
- Flash II v3.0 . . . . . \$44.95
- Chaos Strikes Back . . . . . \$24.95
- Civilization . . . . . \$45.00
- Frontier Elite 2 . . . . . \$49.00
- Canon Folder . . . . . \$49.00
- Llamazap . . . . . \$39.95
- Pinball Dreams . . . . . \$39.95
- Genulator Gold CD . . . . . \$49.95
- Genulator Board . . . . . \$99.00
- PC X-Former 3.5 CD . . . . . \$49.95
- Diamond Edge 2 . . . . . \$47.00
- NOBOLD . . . . . \$69.95
- Squirrel Zip Utilities . . . . . \$34.00
- HD Driver . . . . . \$39.95
- M. Beacon Typing . . . . . \$39.95
- Math Blaster . . . . . \$29.00
- Art for Kids . . . . . \$59.00
- Mixed-Up M. Goose . . . . . \$19.95
- Black Cauldron . . . . . \$19.95
- Flash II v3.0 . . . . . \$44.95
- Chaos Strikes Back . . . . . \$24.95
- Civilization . . . . . \$45.00
- Frontier Elite 2 . . . . . \$49.00
- Canon Folder . . . . . \$49.00
- Llamazap . . . . . \$39.95
- Pinball Dreams . . . . . \$39.95

### CABLES - CALL FOR EVEN MORE!

- SCSI 25 to 50 . . . . . \$19.95
- DMA 2ft . . . . . \$19.95
- SCSI 50 to 50 . . . . . \$19.95
- DMA 4ft . . . . . \$29.95
- Falcon SCSI . . . . . \$29.95
- 12 ft Monitor Ext. . . . . \$29.95
- SCSI 2 to SCSI 2 . . . . . \$29.95
- 3 ft SMI47 Extension . . . . . \$19.95

### SIMM RAM

- 1 x 8 30 pin 1MB . . . . . \$29.00
- ST Format . . . . . \$39.95
- 4 x 8 30 pin 4MB . . . . . \$95.00
- ST Format (6 Mo.) . . . . . \$69.00
- 2 x 32 72 pin 8MB . . . . . \$199.00
- Future Music . . . . . \$39.95
- 4 x 32 72 pin 16MB . . . . . \$399.00
- Future Music (6 Mo.) . . . . . \$69.00



**Crystal Trackball!**  
Works great on your ST! Flashes red and green! Amaze your friends! Supersmooth movement!  
**Now Just \$49.95!**

## PageStream

**SPECTACULAR NEW PRICE! JUST \$39.95!**

### INCREDIBLE DTP POWER

PageStream has been the best-selling desktop-publishing program for years. It's every bit as powerful as PageMaker, QuarkXpress, and programs on other platforms. Now, as a special offer, PageStream 2.2 is available for just \$39.95.

Sure, PageStream used to cost \$179.95. Now it's even more affordable. Full PostScript printing support, plus drivers for dozens of printers. Fully compatible with ST, TT, Falcon, and MagiCMac. **And yes, this is the full version of PageStream 2.2!!**

PageStream has built-in graphics creation and editing tools, including the pointer tools, text tool, column tool, reshape tool, drawing tools, and page change tool. Also included is the ability to rotate objects in 1/100 degree increments, and alignment of objects (left, right, top, bottom, or centered). Again, it's a full featured page layout program!

PageStream uses standard Adobe Type-One Postscript fonts, CompuGraphic Intellifonts and its own DMF fonts! **How can you go wrong??**  
**PageStream 2.2 (ST, TT, Falcon) . . . . . \$39.95**





**Joysticks: \$14.95!**  
Plays like an Atari CX-40 standard joystick, but with two buttons on the base and a top fire button. Construction is very sturdy! Stick grip is molded to fit your hand.



**Scanner Blowout!**  
Limited Time Only! Mergan 400dpi Hand Scanner includes Touch-Up and OCR Jr. Software. Works with ST, Mega STE, TT030, Stacy, STE computers! Get one while they last!  
**Just \$99.95!**

## FLATBED SCANNERS FOR TT & FALCON030!

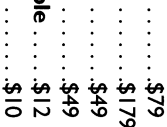
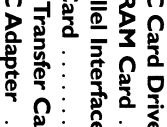
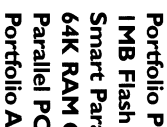
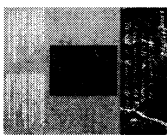
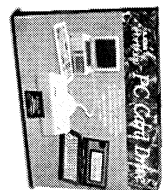


**FINALLY!  
REAL DTP  
POWER ON  
YOUR ATARI!**

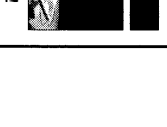
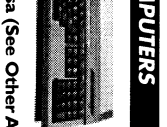
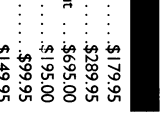
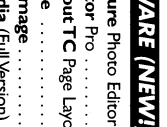
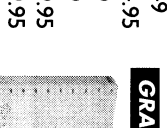
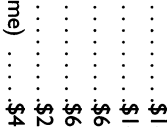
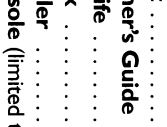
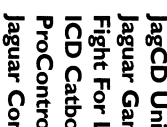
**EPSON SCANNERS**  
ActionScanner (1200 dpi) ..... \$599  
ES1000C (1600 dpi) ..... \$799  
ES1200C (2400 dpi) ..... \$999

### OTHER SCANNERS

GT LOOK II (for Epson Scanners) .. \$149  
HP Driver (4C, 3C, IIP, IICX) ..... \$149  
Mustek Driver (600 or 1200) ..... \$149  
HP Scanjet 4C (2400 dpi) ..... \$999  
Mustek Paragon 600 (600 dpi) .... \$449



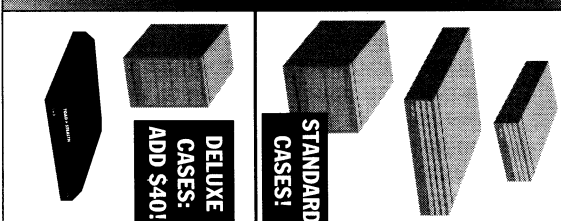
**Lynx Kit Case** ..... \$24.95  
**6-Hour Battery Pack** ..... \$39.95  
**Car Power Adapter** ..... \$12.95  
**Comlynx Cable** ..... \$10.00  
**Battlezone 2000** ..... \$39.95  
**Super Ast/Missile Command** ..... \$39.95



**Beetle Mouse! New Construction!**  
The Ultimate ST Mouse just got better! New construction model delivers 400 dpi (from 320dpi), even more sensitive buttons, and heavier mouseball for smooth, reliable performance! Try the mouse that over 10,000 Atari users already adore! Available in 5 colors, including U.S. Flag and Ladybug!  
**For Atari, PC, or Mac! Still Just \$34.00!**



## HD DRIVER JUST \$35 WITH HARD DISK!



SIZE	SPEED	TYPE	BRAND	BARE	IN CASE
105MB	15ms	Autopark	Quantum	\$79	\$99
420MB	12ms	Autopark	Quantum	\$199	\$249
340MB	12ms	Autopark	Quantum	\$229	\$299
730MB	9.5ms	Autopark	Quantum	\$349	\$319
850MB	9ms	Autopark	Quantum	\$379	\$349
1GB	9.5ms	Autopark	Quantum	\$349	\$419
2GB	9.5ms	Autopark	Quantum	\$649	\$719
135MB	15ms	Removable	SiQuest	N/A	\$209
200MB	15ms	Removable	SiQuest	\$449	\$499
270MB	15ms	Removable	SiQuest	\$429	\$469

**Hot Drives!**  
Siquest EZ-135MB External! Just \$229!  
4X SCSI External CD-ROM! Just \$229!  
**ICD Link 2: \$99!**  
Interface for your Atari! Hook up hard drives & CD ROM!  
Comes with software & complete manual!

## ATARI CD-ROMS & DRIVERS

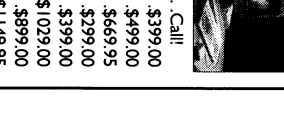
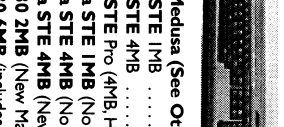
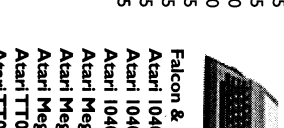
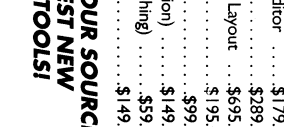
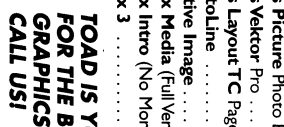
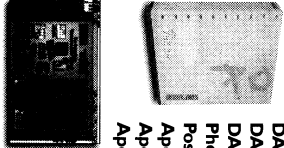
S.A.R.A. ....	\$19.00	SURF 2 D SD SET .....	\$49.95
S.A.R.A. w/Golfers .....	\$89.00	All Things Falcon .....	\$19.99
Extended Pro .....	\$29.00	Elec. Spinner Graphics .....	\$19.99
Atari CD Master .....	\$39.00	Moving Pixels .....	\$34.00
Photo Show Pro .....	\$39.00	Crashy Crypt 1-3 ea .....	\$34.95
WhiteLine Linux 68/K .....	\$54.00	Crashy Crypt 1+2 .....	\$49.99
WhiteLine DELTA .....	\$45.00	Mega Archive 2 .....	\$34.95
WhiteLine ALPHA .....	\$34.00	Transmission Falcon .....	\$34.00
Quikforms .....	\$49.95	Climpmania .....	\$49.95
Bitstream 500 Fonts .....	\$44.95	Ausgabe PD 1.3 ea .....	\$39.00
2000 TrueType Fonts .....	\$29.95	Font Garden .....	\$45.00

## MUSIC HARDWARE & SOFTWARE

Chase Life .....	\$89.95	Falcon SPDL Int. ....	\$299.00
Chase Audio 16 .....	\$589.00	Falcon Analog 8 .....	\$549.00
Chase Studio Pak .....	\$129.95	Falcon Analog 4 .....	\$299.00
Notator SL .....	\$249.95	Jam In/Out .....	Call
LOGIC .....	\$349.95	Sunrise SE-600 .....	\$629.00
UNITOR II .....	\$349.95	Sunrise SE-800 .....	\$999.00
EXPORT .....	\$129.95	MIDI OUT-4 .....	\$199.00
MIDI Thru Cable .....	\$3.95	Datadot Tape Backup .....	\$39.00
Band-In-A-Box .....	\$79.95	Sample Rate Conv. ....	\$399.00
AudioTracker .....	\$249.00	Guitar Dreams .....	\$149.00
AudioMaster .....	\$399.00	Cartraster Life .....	\$89.00

## ATARI COMPUTERS

Falcon & Medusa (See Other Ad) .....	Call
Atari 1040STE 1MB .....	\$399.00
Atari 1040STE 4MB .....	\$499.00
Atari 1040STE Pro (4MB, HD Floppy, 206) .....	\$669.95
Atari Mega STE 1MB (No Case) .....	\$299.00
Atari Mega STE 4MB (No Case) .....	\$399.00
Atari Mega STE 4MB (New Machine) .....	\$1029.00
Atari TT030 2MB (New Machine) .....	\$899.00
Atari TT030 6MB (includes 4MB TT RAM) .....	\$1149.95



**GRAPHICS SOFTWARE (NEW!)**  
DA's Picture Photo Editor ..... \$179.95  
DA's Vektor Pro ..... \$289.95  
DA's Layout T/C Page Layout ..... \$695.00  
PhotoLine ..... \$195.00  
Positive Image ..... \$99.95  
Apex Media (Full Version) ..... \$149.95  
Apex Intro (No Morphing) ..... \$59.95  
Apex 3 ..... \$149.95

**TOAD IS YOUR SOURCE  
FOR THE BEST NEW  
GRAPHICS TOOLS!**  
CALL US!

## TOAD COMPUTERS

570 RITCHIE HIGHWAY

SEVERNA PARK, MD 21146-2925

(800) 448-8623

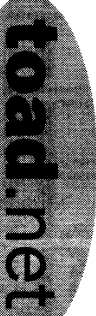
(410) 544-6943 info

(410) 544-1329 FAX

http://www.toad.net



Join our e-mail mailing lists! Send subscribe stnews' or 'subscribe jagnews' to majordomo@lists.toad.net!



Check Out Our Internet Site!  
FTP: ftp://ftp.toad.net/  
WWW: http://www.toad.net/  
Email: info@toad.net  
stfax@toad.net



GET OUR  
NEW 36-  
PAGE  
CATALOG!!  
PACKED  
WITH  
PRODUCTS!

Thank you for making Toad Computers the #1 source for Atari merchandise since 1986!

*TOS, GEM and other good things . . .*

163264

COMPUTER

jaguar  
lynx

*eric march*

GAME

**She Sells C-Shells?  
No Cable+No ISDN=  
No 'Net?  
No Way!  
Eric teaches us how to  
Shell out and just ftp  
away . . .**

RECOMMENDED

***The past two issues have covered pretty much all you need to know to get yourself connected to the Internet via more exotic, faster means. Such means however, are expensive compared to the old standby: your conventional phone line. Everyone has at least one. They're cheap, reliable, readily available, and a proven technology. They are also what more than 95% of the home-based Internet community use to get connected to the net.***

Of those, an estimated three quarters or more, are connected by some means of graphical interface, via a SLIP (Serial Line Internet Protocol) or PPP (Point-to-Point Protocol) package such as Winsock on a Windows-based PC, or STiK on the Atari. The benefit of SLIP and PPP connections are that the user has access to point-and-click interfaces with which to navigate their way through the

World Wide Web, IRC, FTP, and other such services. Additionally, such connections for the most part, utilize your system's resources when running programs to access these services, instead of your provider's, and therefore service tends to be a little faster. And of course, let's not forget the graphical capabilities of the Web, with its nice pictures, illustrations and text fonts.

But what if all you want out of the Internet is information? Or file transfer capabilities? Or just chatting it up on the IRC? What if you don't want the frills of pretty graphics and point-and-click interfaces? What if all you want, is a nice, down-to-earth shell within which you may access text-based versions of IRC, the World Wide Web, FTP, and so on? The answer to these questions is: 'Shell'!

Unfortunately, an alarming number of internet providers do not offer shell as an option, or if they do, it is at a premium. One of the main reasons for this, touched upon in my introduction, is that you are utilizing their system resources when accessing programs to use the services you want. In addition, the user must have at least a passing familiarity with Unix and Unix shells in order to get around. Many providers are wary of the fact that shell users can hack into systems much more easily than SLIP or PPP users (although with proper security measures in place, it is not in any way a simple thing).

If you do have shell as an option however, or pay the premium required by some providers for this option, then you need to know how to navigate around the system. If you are at all familiar with a DOS-style operating system, finding your way around a Unix shell will be a doddle!



Before I explain however, you should know one important fact about Unix: It is a case-sensitive operating system, and most of the time, case counts. The command 'gopher' for example, is not the same as 'Gopher' or 'GOPHER' or any other permutation. Generally, all Unix commands are entered in lower case. Another fact you may want to know is that while the name may change (Linux, NetBSD, Unixware, and so on), they're all still, in the end, Unix-type operating system, and everything explained here applies. Last, is that where DOS and other DOS-like operating systems separate directories with a backslash ('\'), Unix uses a normal slash ('/') to denote a directory.

## WHAT YOU NEED

If you want to make good use of a shell, you're going to need a terminal program that is ideally capable of interpreting VT-100, or VT-102 emulation. ANSI emulation will do in a pinch. Apart from that, all you need is your modem, and your computer. This is one of the main beauties of accessing the Internet via a shell: You don't need anything fancy to do it. Just some basic tools and hardware.

## IN A NUTSHELL

You may want to know what shell you're using. It is not terribly important; all the basic Unix commands are the same (though different shells have different features). TCSH for example, features a command history buffer that remembers your last commands so that you can select them with the arrow keys as needed, as well as command spell checking, and other useful features. Other shells include BASH (Bourne Again SHell), KSH (Korn SHell), CSH (the predecessor to TCSH), SH (the basic shell) and so on. To find out what shell you are using, you could type 'ps' from the Unix prompt. This command lists all your currently running processes. You should see something that looks like this:

```
PID CLS PRI TTY  TIME COMD
16119 TS 59 pts027 0:00 ps
16088 TS 70 pts027 0:00 tcsh
```

As you can see, there are two processes running here. One is the 'ps' process itself, and the other is your shell process. Any shell can be loaded from within any other shell as needed, though you may want to speak with your provider about getting them to

permanently change your default shell if you are unhappy with your current one.

## COMMAND AND CONQUER

Once in the shell, you will more than likely be presented with a prompt. This can vary from shell to shell, and provider to provider. It could be a simple '%' prompt, or it could look something like this example TCSH prompt:

```
[100] zap:/u/di/diehl>
```

Either way, once you are at a prompt, a number of basic commands are at your disposal. First and perhaps most important, is the 'ls' command. This is analogous to the MS-DOS command 'DIR' and is used to display the contents of the current directory. Used by itself, it is not very informative; it will show filenames only. To get a more meaningful listing, type 'ls -al' instead. The '-al' flags will tell the ls command to display all files, including hidden files (files that begin with a '.') and directories, along with file sizes, creation dates/times, ownership, and file attributes. It will probably look a little bewildering at first, but it is enough to know that you needn't concern yourself with most of that stuff, most of the time.

Now that you can access a directory listing, you may want to know how to move around and do things. A brief list of Unix commands are as follows:

```
cd      Change Directory
mkdir   Create a directory
rmdir   Remove a directory
mv      Move or rename a file
cp      Copy a file
```

There is an on-line help system for more help on these or any other Unix commands. Simply type 'man <command>' (where <command> is the command you wish to read up on) and it will bring up a help sheet on using that command. Be warned that man pages (as they are called) tend to be a technical read, so they may not give the novice a proper understanding of the command beyond its basic usage.

## WHERE DO WE GO FROM HERE?

Now that you have some rudiments of Unix in your possession, you may access one of the many services available to you. Unfortunately, I do not have space to expound on the many features

of all of these services, so I will save most of those for future issues. This time, I will explain FTP, or File Transfer Protocol. It is through this that you may transfer (download) files to your account from one of a myriad FTP sites, or file repositories, or upload files to these sites.

## TO FTP, OR NCFTP? THAT IS THE QUESTION.

While there are a number of FTP programs or 'clients' as such programs are called. The two main ones are FTP, which is the standard Unix client, and NcFTP, an enhanced version of FTP by NcMERsoft. Most of the commands remain the same, but NcFTP automates many of the tedious chores that were once a necessity within normal FTP. Most providers have it installed on their system, but for the benefit of those who don't, I will detail how to go about FTPing within normal FTP, and then explain how it may be different within NcFTP.

## LET'S LEECH!

Type 'ftp' from the Unix prompt. You will be presented with the FTP prompt:

```
ftp>
```

Let's set up the program so that it is more user-friendly. The following is a sequence of commands and FTP's responses, entered from the FTP prompt:

```
ftp> hash
```

Hash mark printing on (1024 bytes/hash mark).

```
ftp> prompt
```

Interactive mode off.

```
ftp>
```

The first command turns on hash mark printing, so that FTP will display one hash mark for each kilobyte of data it has downloaded. Without it, nothing is displayed, so there is no indication of the transfer's progress. Finally, 'prompt' turns interactive mode off. This is for use with the 'mget' command, which gets multiple files with one command. If left on, FTP will query you for each file you have specified that it transfer. The use of this mode is entirely up to you; it is useful to have it on, for example, if you simply want to do a 'get \*' to download everything, and then simply pick and choose which files you actually want as it

queries you.

Good. Now it has been set up to our liking. Let's connect to a site:

```
ftp> open ftp.cnam.fr
```

Connected to brunner.cnam.fr

220 brunner.cnam.fr FTP server (Version wu-2.4(1) Wed Dec 14 14:12:22 MET

1994 ready.

If the connection is successful, you will then be prompted for your username and password. Don't worry, all public FTP sites allow anonymous access, so anyone can get on. For your username, simply enter 'anonymous' and for your password, enter your E-Mail address. For example, if I wanted to login, I would enter the following:

Name (ftp.cnam.fr:diehl): anonymous  
331 Guest login ok, send your complete e-mail address as password.

Password: diehl@io.org

The password will not be echoed to the screen, so you will not see it as it is entered. I have entered it here only for clarity. Once you are online, and it has printed its login message, you will be back at the FTP prompt. First, turn on binary mode for your file transfers, like so:

```
ftp> binary
```

200 Type set to I.

Turning on binary mode will insure that the files you get will be transferred

properly. When binary mode is off, files are transferred in 7-bit ASCII format and unless what you are transferring is a straight ASCII text file, it probably isn't going to work.

Now, let's hunt for some files. If you wanted Atari files, for example, you would go into the Atari directory, like so:

```
ftp> cd pub/Atari
```

220-CWD command successful.

```
ftp>
```

An important note here is that, almost always, publicly downloadable files are located in the 'pub' (for Public) directory from the root directory. Such files are usually categorized by operating system and/or computer platform, but each site is different, so you may want to use 'dir' or 'ls' to get a listing of the contents of each directory.

Now, the problem is, you probably aren't going to know what these files are. There are no file descriptions! What usually exists however, is a file that is named 'index' in some fashion. On ftp.cnam.fr for example, there is a file in each directory called 0index.txt, which contains filenames and descriptions of each of the files therein. To view this file, download it by typing 'get 0index.txt'. The file will be transferred to your account. Now, you can escape to the shell once again, and read it by typing 'more 0index.txt' from the shell prompt. Once you've satisfied yourself with that, typing

'exit' will return you to ftp once again (be warned that some sites will automatically log you off if you don't do anything for more than a set period of time)

Let's say you've located the file you want. Change ('cd') into the appropriate directory, and type 'get <filename>' (where <filename> is the name of the desired file.) The file will be transferred to your account, into the directory from which you launched FTP.

Alright, you've got the file. Now, let's log off the site and download it. Type 'close' from the FTP prompt, and then 'quit'. You will be returned to the shell. You may now download the file from the shell prompt by typing 'sz <filename>'. It will then be transferred to your computer and you may then enjoy it at your leisure!

KUDOS!

You've just completed your first FTP session! There is more to it than this, if you want to become truly adept. But this tutorial was designed to give you a working idea of how to transfer files and what's been explained is enough to get you downloading whatever your heart desires.

Next issue, I will detail the many splendors of the IRC (Internet Relay Chat), a worldwide chatroom. Until then, happy leeching!▲



*A graphical software system  
that runs the same software on*

**Atari  
Macintosh  
and other computers**

**No more software porting!**

**Esquimalt Digital Logic, Inc.**

820 Dunsmuir Rd.,

Victoria, B.C.

Canada V9A 5B7

Phone: (604) 384.0499

FAX: (604) 384.0575

E-mail: omen oases.com

URL:

<http://www.oases.com/~omen>

## OASES: THE SYSTEM

Software written under OASES on the Atari ST/TT/Falcon will run without modification under OASES on the Apple Macintosh, and on OASES for PC, now under development.

OASES has a modular structure with a compact core of 37K bytes.

OASES has all the contemporary features such as pre-emptive multitasking, graphical interface, drag and drop transfers, outline fonts, multi-media drivers.

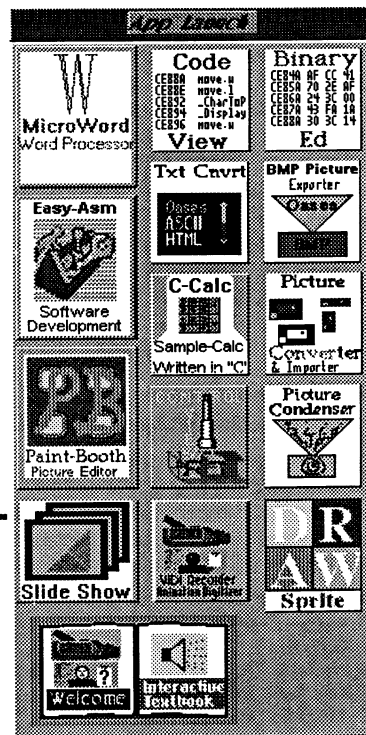
OASES system includes a Text Editor/Document Processor, graphics utilities and an Authoring System for creating interactive multi media literature. Structured 68K assembler & software development tools are available.

**OASES-for-Atari \$44.95 CDN or \$33.95 US**

**OASES-for-Mac \$69.95 CDN or \$52.95 US**

(Includes Power Macintosh)

Please add \$7 for shipping







# **mg**i PhotoSuite™

Windows 95®, Windows NT™ and Windows® 3.1

**The Best Way  
to Edit, Capture,  
Catalog and  
Enhance Your  
Photographs**

**Internet  
Helper  
Application**

**Digital Photo Album  
Painting & Drawing Tools  
Photo Editing & Visual Effects  
Microsoft Office Companion  
Scanner & Digital Camera Support**

**MGI Software Corp. 1-905-764-7000**

**32-BIT  
APPLICATION**

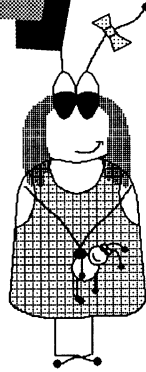


**Microsoft  
Windows® 95**



# DRAW-EDIT

**Lianne continues her series on Art & Drawing programs. This time it's . . . needful stuff about Bitmaps and Vectors**



**Well I mentioned that I would tackle Outline Art this time around, and I don't want to disappoint anybody—but I thought I'd give you a little taste of some drawing program definitions first. We'll get into vector drawing programs in a moment.**

Here goes . . .

There are two different kinds of Art Programs: Bitmap and Vector. Bitmap programs are casually known as 'Paint Programs' and Vector as 'Drawing Programs'. The names don't really distinguish between the two, as one can paint and draw using either. The fundamental, visible difference is that when a Vector graphic is re-scaled, the image retains its smooth edges. A Bitmap graphic is a drawing created using proximally square, screen pixels (picture elements). Your familiar ST High resolution displays 640 pixels across the screen (horizontally) and 400 pixels up and down the screen (vertically). In a Bitmap drawing program each pixel is either on or off (filled or not), and there can be no half-filled pixels. 'Artists' can erase half a circle or make small detail

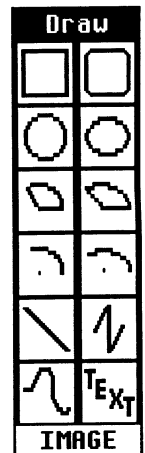
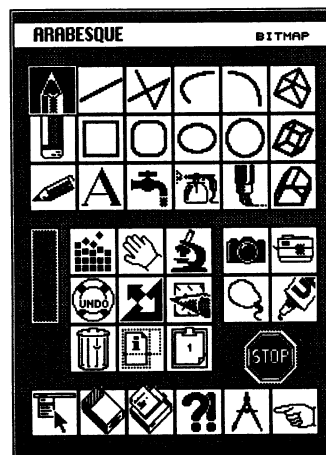
changes by simply removing individual pixels as necessary. The shortcoming of this format is that when one wants to re-size their little creation, the end result is usually a very blocky or 'steppy' looking picture (a usually adverse effect sometimes referred to as 'Pixelation'). The information stored in this drawing includes the screen dimensions of x-wide and y-high (however much screen area was needed to create the drawing). A certain number of pixels are filled and a certain number are not. Enlarging the picture also means you enlarge the screen size proportionately. While you don't see the enlarged screen, you do see the effect of the larger proportionate amount of filled pixels: big ugly blocks to be exact.

A vector graphic on the other hand, is really a set of mathematical instructions

(formulas), though what you see on-screen looks just like a picture or drawing. A vector arc for example, is not simply a set of filled pixels however. The data used to create the arc is closer to: "start here, end there, and curve the line around a certain radius." No matter how small or how large you make the drawing, the mathematical instructions are still the same. The program translates those instructions, and fills in the number and percentage of pixels required to complete the picture.

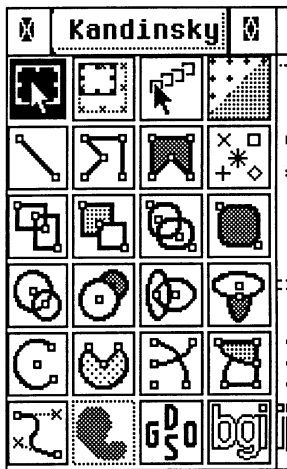
You have no idea how much I hope this makes some sense to you. I'm really good at playing with these programs, not describing the technical stuff behind the programs' methods of operation. Smooth lines are only one important difference between the two. Another very important difference is how bitmap and vector graphics are created.

When I draw a Greeble (one of my cartoon characters), I use a bitmap paint program called PAD. Because of the nature of the program, I can erase part of a circle in order to fit in other elements of the picture; like the eyes for instance. Small details can be added or deleted by changing each individual pixel. Drawing

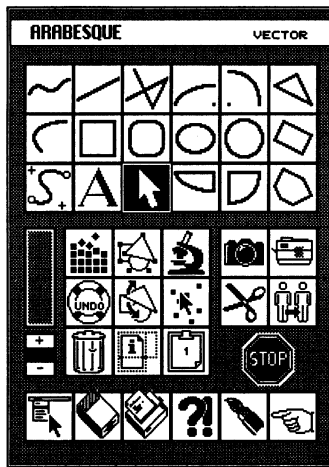


Left: Arabesque's Bitmap tool box. Right: The basic Easy Draw vector tool box.

Never be fooled by the apparent simplicity of any of these dialogs; very often, another Right Click will reveal many more options!



Left: Kandinsky's main tool box. Loads of options - we're going to review this program in a future installment. Right: Arabesque's vector tool box. Notice the absence of polygon options.



with a Vector program is a completely different experience. Each element of the picture is 'layered'. Instead of erasing part of one element (which are called 'Objects' in vector graphic terminology) in order to fit another in, the new vector object (or group of objects), is placed on top of the previous one (as necessary). It stands to reason, as it is impossible to erase part of a mathematical instruction.

This technique is great for exact placement of each part of the picture and allows the artist great freedom to change one element without the work of filling in or erasing others. You can see how this layering works in the two sample images I have included. As you can see in the first we have a close up of the nose of the Space Shuttle. In the second, the white space, the grey shadow and one of the windows has been moved.

Vector drawing programs are nothing new. I have a 1987 copy of 'Easy Draw' from Migraph that I bought for \$10.00 at an area retail store. The original sticker price was about \$200.00, so I thought I had a great buy until I realized that my version didn't do bezier curves. Migraph would

want you to know that the latest version incorporates bezier curves. Easy Draw is a colour vector drawing program, which is why I bought it in the first place. I was playing with demos of Kandinsky and Arabesque (both demo versions) in my search for the perfect colour drawing package and I couldn't resist.

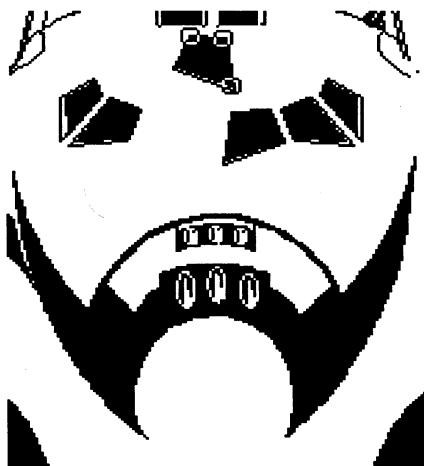
Easy draw will work on any Atari/TOS/GEM machine including the Falcon. With 1MB of RAM, you should be able to draw up to 12,000 objects. Easy Draw has the same drawing tools as other paint programs; circles and squares, freehand lines, straight lines, arcs and text functions are all there. Even the indispensable Bezier Curve function shows up in the latest incarnation.

Creating a shape (a circle or a square, for example), is done in much the same way as bitmap drawing programs. A left mouse click places the start point for the object, and moving the mouse stretches the shape out until it reaches the desired size. The completed object in a vector drawing program is surrounded by a box frame with handles. These handles are small black spots at each corner and each side of

the frame. By clicking on a handle and moving the mouse, the frame can be made bigger or smaller to re-size the object. Text is placed in the same manner, except that when you are finished creating the frame, a cursor shows up allowing you to enter text. If the frame is too small, simply re-sizing it will give you all the space you need. Some vector drawing programs (such as Outline Art), provide the option of creating a text frame first and then entering text via a dialog box or, entering the text in the dialogue box without creating a frame (the special dialog box provides options for font, size, effects, angle, rotation, circular effects, etc., and then creates the appropriately sized frame when you are finished).

One reason why Easy Draw might make a good foray into Vector drawing is the fact that it allows you to use the same fill patterns as most bitmap programs, a feature one might have become accustomed to and would not want to give up too easily. You can even create your own fill patterns. Other familiar features includes the ability to edit the line thickness and pattern, place shadows behind objects, and draw in transparent mode. Grouping several objects together allows for simultaneous re-sizing or moving, and using the grid feature will ensure that your frames are properly aligned. Like many Vector drawing programs, Easy Draw saves your creations in GEM-Metafile format. My version saves and loads only GEM files. I wish I could tell you if the latest version was any more versatile, but I do not use Easy Draw often enough to warrant an upgrade; sorry about that. Most of the drawing functions are activated via drop down menus.

Kandinsky, a fully translated German effort from Olaf Meisiek, is a terrific shareware alternative if you can't afford the price of commercial software. For \$35.65 (including exchange, M.O. costs, etc.), you get a very powerful color, vector drawing program with all the bells and whistles. There are the usual shapes, poly lines and poly sided figures (filled with a chosen pattern if you like). Like some bitmap programs, Kandinsky will make use of scalable, vector Speedo fonts (using the SpeedoGDOS or NVDI vector font engines). A right click of the mouse once the GDOS icon is selected, will bring up a sub menu that lets you choose the style and size and attribute of the font of your choice. There are even some native BGI fonts (about a dozen or so) if you need them. Kandinsky will import any GEM-Metafile (great for those who already own a program like Easy Draw). It will also import IMG files and save



Postscript files. It's quite versatile, very compatible and registerable with our friendly neighbours in the UK (Joe Connor's Interactive Shareware Registration Scheme; contact joeconnor@cix.compulink.co.uk).

Now if you don't mind the fact that it is only a monochrome program, 'Arabesque Professional' (a fully enabled version was mistakenly given away free on disk #53 of ST Format magazine, three years ago) combines the two art worlds in one program. Arabesque is both a Vector and a Bitmap drawing program. The vector side imports and exports GEM-Metafiles, Arabesque's native format and (for you Calamus users), Calamus CVG format. The Bitmap side will import and export any manner of file formats including IMG, IFF and DEGAS. Arabesque is a program in that covers all the basics but I found it short on special effects. It has more fill patterns than either Easy Draw or

Kandinsky, but that is pretty much where the fun stops. It's probably the perfect program for the artist who only needs to edit, or add a little this-'n'-that to an existing creation. The latest version (NOT free) of Arabesque (it's had two important updates in the last 24 months), is available from Computer Direct (1-800-947-5203) or TOAD Computers (1-800-448-8623).

Vector drawing programs really shine when you see the printed, finished product. Smooth lines and perfect curves are a treat to see. The output on a basic inkjet or bubblejet printer can be impressive. Higher resolution printer output is better (600x600 dpi inkjet, 600+ dpi laser, etc.). If you are going to be taking a floppy disk full of your art work to a Service Bureau for 1200 dpi (or higher) prints, vector graphics are the way to go.

In the next installment of this series, I will take a close look at one of the neatest, most powerful vector drawing programs

around: Outline Art 3.

(Ed. Note: I know, I know, we promised you Outline Art 3 already for THIS issue. Lianne felt this piece was a little more important, however).▲



# HARD DISK SENTRY<sup>tm</sup>

The best selling disk repair and optimization utility for all Atari ST, STe, TT, & Falcon030 computers.

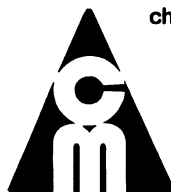
Get the world's best selling hard disk optimizer (defragger) and speed up your hard disk's performance! Hard Disk Sentry works flawlessly with all Atari ST, STe, TT, and Falcon030 computers. Hard Disk Sentry will diagnose and repair common - and dangerous - disk problems on hard disk partitions of any size. It even works on floppy disks and Syquest drives.

Hard Disk Sentry now includes the Quickopt module that allows for unattended optimization of hard drive partitions. You can specify any partition(s) to be optimized via simple command line parameters. Quickopt will analyze the specified partition(s) and, if no problems are found, will optimize them. Quickopt will NOT attempt to optimize any drive on which it encounters errors. It will, however, keep a log of all errors it finds so you may repair them using Sentry.

Total FAT clusters	18497	Bad File Endings	0
FAT File Starts	3151	Invalid FAT clusters	0
FAT File Ends	3151	Chain collisions	0
Contiguous Clusters	13812		
Non-contiguous Clusters	56		
Total Files	3157	Orphan Files	0
Total File Clusters	16219	Orphan Descendants	0
Free Clusters	2277	Orphan Clusters	0
Recoverable Clusters	0		
Unuseable Clusters	0	Total Errors	0
Unknown Clusters	0	Total Good Files	3157
Status display for Volume J		<input type="button" value="Continue"/>	<input type="button" value="Print"/>

chro\_MAGIC Software Innovations  
Suggested Retail Pricing (in US Dollars):

Guitaristics \$69	Pianistics \$79
RAM Gizmo \$99	MultiSync Gizmo \$25
Keyboard Gizmo \$79	Falcon A/V Video Adapter \$15
Hard Disk Sentry \$49	Falcon SC1224 Video Adapter \$15



chro\_MAGIC Software Innovations  
516 North Jackson  
Joplin, MO 64801-2755  
United States

Phone: + 1-417-623-7393  
Fax: + 1-417-624-0700





Scott Chilcote conducts an interesting odyssey through the wilderness we call . . .

**Everything  
you always  
wanted to  
know!**

# MiNT and

**Part three of  
a series . . .**

# MULTITOS

## **The Unofficial Advanced User's Guide to MultiTOS, Part III by Scott Chilcote**

**Hello again, folks.**

**In the last couple of  
installments we covered  
topics of interest to the  
general user, including  
multitasking tips and  
configuring MiNT via the  
MINT.CNF file.**

**I have to tell you at this  
point that a lot of things  
are happening with MiNT  
in the online world! Far  
from forgotten, this Atari  
Multitasking OS continues  
to develop and expand. I  
look forward to delving  
into some of the new  
developments soon. It  
wouldn't be fair to hare off  
on new subjects when some  
basic details haven't yet  
been mentioned, but for the  
advanced user we'll try to  
weave in some recent news  
as we catch up to the  
present.**

One new item of interest is the availability of AES 4.10 for MiNT. This version of the GEM AES has been in the hands of developers for a while, but has

recently been made available to the public (see the box accompanying this article).

Probably the best new feature is the much faster AES response under GEM. I'm typing this into my editor under MultiTOS without having to wait for the cursor to catch up; this wasn't possible with the old AES. While no documentation was provided with AES 4.10, a couple of the new features are the ability to 'iconify' a directory window using a new button on the top bar, and the ability to select the font for GEM windows. AES 4.10 seems to lock up occasionally while running with NVDI 3 installed. (Ed Note: NVDI 4 seems to work better). AES 4.10 works fine with SpeedoGDOS, as we might expect.

### **Installing AES 4.10 for MultiTOS**

To install this new AES, copy it to your MiNT/MultiTOS directory (I use C:/MULTITOS) and edit your MINT.CNF

file. Change the line for GEM=C:\MULTITOS\GEM.SYS to the name of the new file, e.g. GEM\_4\_10.SYS or whatever you have named it. Reboot, and welcome to AES 4.10!

This fits nicely into the next subject for discussion which, as hinted at last time, is how to configure the behavior of GEM under MultiTOS.

### **CONFIGURING GEM FOR MULTITOS**

If you've been poking around in the MULTITOS folder since these articles began (which is highly encouraged), you've noticed there's a file called GEM.CNF. When MiNT begins running, the line in MINT.CNF containing GEM=C:\MULTITOS\GEM.SYS tells MiNT to load the GEM desktop. This reads the AES from GEM.SYS, which reads the GEM.CNF configuration file for any specific preferences we'd like GEM to use.

Figure 1: The contents of a modified GEM.CNF file.



```
# gem.cnf
# Last Modified on 2/18/90
=====
setenv PATH=.,C:\MULTITOS
setenv ACCPATH=C:\
setenv ACCEXT=ACC,ACX
setenv GEMEXT=PRG,APP,GTP,ACC
setenv TOSEXT=TOS,TTP
setenv SHSHOW=C:\MULTITOS\VIENER.APP
setenv SHPRINT=C:\MULTITOS\LPR.APP
setenv MANPATH=J:\MANUAL
# AE_FONTID=5533 # Freehand
# AE_FONTID=8010 # Courier 12 pitch
# AE_FONTID=5600 # Century Schoolbook mono - thin!
# AE_FONTID=5755 # Orator 10 - fails in small size
# AE_FONTID=5414 # Letter Gothic 12 - small/faint/thin
AE_FONTID=5543
AE_PNTSIZE=12
setenv TOSRUN=C:\MULTITOS\MINIWIN.APP
run C:\FALCMISC\TLKCLOCK\TLKCLOCK.PR
```

## WHERE TO FIND AES 4.10

**There are two places I know of where AES 4.10 for MultiTOS can be downloaded:**

1. [ftp://ftp.imc.exec.nhs.uk/pub/atari/aes\\_\\_4\\_\\_10.lzh](ftp://ftp.imc.exec.nhs.uk/pub/atari/aes__4__10.lzh)  
and
2. <ftp://ftp.fu-berlin.de/pub/atari/mint/contrib-package/mdk.new/mint030.zip>

Of the two files, the first contains only AES 4.10, a file called 'GEM.SYS'. This issue's article shows how this can be renamed to avoid conflict with the old version. Keeping the old one may be a good idea, particularly if

**other bugs appear in the new version.**

The second item, 'mint030.zip', is an organized file structure that can be decompressed directly onto a boot floppy. It has some useful CPX modules, and contains both new and old AES versions. AES 4.10 is in \MULTITOS\GEM.SYS, while 4.09 is in MULTITOS\OLDGEM.SYS. There are also a couple of interesting utilities in a separate directory.

The configuration file `MINT.CNF` is very useful and well commented. Read this if you want to explore the ways in which MiNT can be customized.

**This last version appears to have MiNT compiled for the Falcon and TT. Some of the files may be useable with older STs, but be sure to replace the MINT.PRG with a version that runs on your machine.**

An example of the contents of a GEM.CNF file are shown in Figure #1.

The most interesting feature of this file is the `AE_FONTID` variable, which works in tandem with a second variable, `AE_PNTSIZE`. Using `AE_FONTID`, we can change the default display font that GEM uses for all desktop text: windows, icons, and menu labels will use this new font. When I first saw this possibility, it really got my attention!

In the early days of the ST I liked using replacement fonts made available by various utilities, but eventually stopped using them because I always had an application or two that would not work properly with them. One of my favorites, Warp 9, did not support MiNT or MultiTOS. Setting AE\_FONTID seemed at first to be the perfect solution.

The documentation did not explain this feature in much detail. I decided to experiment with various settings. The effort resulted in only partial success.

A fixed-pitch font was required in order to have columns line up properly on the GEM desktop. I happened to have a CD-ROM with some monospaced speedo and truetype fonts, so I installed them for both SpeedoGPOS and NVDI 3.

**First problem: how does one find out what the IDs of the installed fonts are? My initial guess, which was to try 1, 2, 3, etc., was wrong. I looked on the 'Net for some info on GDOS fonts, and found the**

GDOS FAQ, "More Joy of GDOS," by Gerd Castan. If you have access to a web browser, you can get this from [http://www.mcc.ac.uk/~dlms/GDOS\\_FAQ](http://www.mcc.ac.uk/~dlms/GDOS_FAQ) (it's a handy web site for many Atari-related goodies).

This document mentions some locations for GDOS utility programs. I had the most success with GD-Check which among other things, prints out font samples containing the IDs of the currently installed fonts.

I then began the tedious process of starting MultiTOS with the GEM desktop with various AE\_FONTID settings. Trying several different fonts requires editing GEM.CNF and rebooting the Falcon; I must have logged 65 reboots with various fonts! Unfortunately I didn't find a font that worked well enough to use in place of the standard GEM font. Part of the problem is that some fonts don't rescale properly, and refuse to appear on the icon labels. Those that do show up look trimmed at the top and/or bottom, as if some of the pixels were shaved off. It seems that a font has to be designed very carefully to look good in place of the standard GEM font.

Figure 2 shows the best results I achieved. If someone else has found a good alternate font for the desktop, I'd enjoy hearing about it. Perhaps some of the early monospaced bitmapped fonts for standard GDOS? The fonts that AES 4.10 allows in its windows look attractive;

even proportionally spaced ones. The screen shot of AES 4.10 shows an example. I had to use NVDI 3 to display them however. Under SpeedoGDOS, only the standard font appears, although the size can be changed. I suspect that GEM.SYS uses the ASSIGN.SYS to determine the font choices when NVDI isn't installed. This may be the key to increasing the font selection, but more experimentation is required.

**AES\_PNTSIZE** allows the point size of the display font to be adjusted. This only looked reasonable when set to twelve points; anything else just didn't fit into the space provided very well.

There are couple more variables of lesser interest:

AE\_SREDRAW = 1 AE\_TREDRAW = 1

These aren't shown in the example because we rarely need to change these from their default values. The first one, `AE_SREDRAW`, tells the AES to completely redraw the screen whenever a GEM program starts up. The second variable, `AE_TREDRAW`, tells the AES to redraw the display whenever a GEM program exits. Since changing either one of these to zero might result in the display not being cleaned up between applications, it's a good idea to leave these unchanged.

The 'run' command in GEM.CNF is very useful. The example in figure 1 contains the line

```
run C:\FALCMISC\TLKCLOCK\
```

## TLKCLOCK.PRGM

This causes the talking clock to appear on the GEM desktop whenever I start MultiTOS. You can add several GEM utilities as 'run' programs, such as PROCALC and CALAPPT, and they'll be waiting on your GEM desktop (providing you have enough RAM).

The other command in this file, 'setenv', is used to assign values to environmental variables. This command is borrowed from Unix shell syntax, and is primarily of interest to developers. There is some interesting road to be covered here, and this is planned for an upcoming installment on how to set up a Unix-like development environment under MiNT.

## GIVING CREDIT WHERE IT'S DUE

I'd like to break away temporarily from the workings of MiNT & MultiTOS to give credit to Eric Smith, the creator of MiNT, and some of the other people who put a huge amount of dedicated effort into making this excellent software available. While he no longer develops MiNT & MultiTOS directly, work does continue.

I contacted Eric via e-mail, and asked if

he would be kind enough to provide a bit of history about his involvement with MiNT. Here is how he answered.

"I was a graduate student in Math at the University of Western Ontario when I wrote MiNT. At the time I was working on the GNU C library, and porting Unix programs to TOS. The task was made much harder because some features of Unix were missing from TOS, plus, I wanted multitasking.

In fact, I had written an earlier multitasking system, but it was a bit buggy and incomplete. So I started over, with Unix compatibility in mind.

The first version of MiNT (0.1) was dated May 18, 1990. It was just a very small multitasking kernel, with not all GEMDOS features implemented, but it did run some TOS programs. By version 0.5 (a few months later) it was stable enough to release to the general public. Soon a lot of very talented people were helping out with bug fixes and suggestions. Alex Kiernan (of HiSoft), Allan Pratt (of

Atari), and Julian Reschke were particularly helpful in the early days.

It was Allan Pratt who persuaded the management of Atari to license MiNT. Apparently Atari were at the time interested in multitasking, so rather than re-invent the wheel they decided to use MiNT as the basis for MultiTOS. I helped out for a while remotely. After Allan left Atari in 1992, they hired me to come to Sunnyvale to work on MiNT, MultiTOS, and TOS in general.

While I was at Atari I helped out with the Falcon version of TOS, worked on MultiTOS, and later helped develop Jaguar software. In November of 1995 I left Atari to go to work for a startup company called VM Labs. MiNT meanwhile has kept growing thanks to the enthusiasm of the developers on the MiNT mailing list. Michael Hohmuth has been coordinating the development of the 'alternative' version of MiNT (FreeMiNT) which has some features missing from the 'official' MiNT that I maintained at Atari.

Hope this bit of background helps."

Two other names I'd like to mention are those of Howard Chu and Jwahar Bammi. In the 'golden days' of early MiNT development, when you had to compile the GNU tools and nearly everything else in the development system just to test a new release, I read a lot of source code. The names of these fellows constantly showed up in the credits. Howard Chu supplied the following information regarding his efforts:

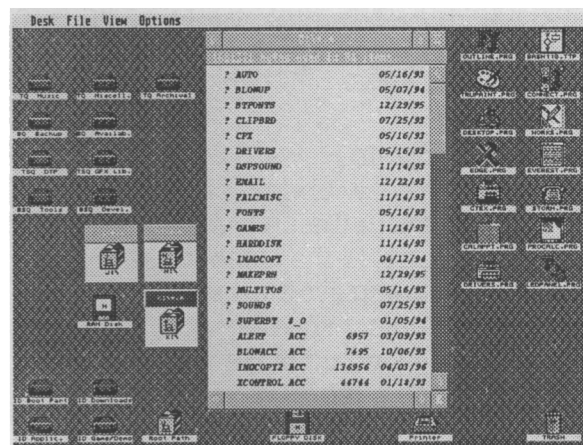
"Hm... You can put me down for GCC, GNU Make, and parts of the libraries. Jwahar (Bammi) as well for GCC and the libraries, and GDB. Eric Smith, as author of MiNT, really has to take credit for pushing things forward. Without his work, everything else would have remained at pretty much toy status. I primarily added onto existing work; I goaded Eric into adding shared-text support to MiNT, and then I wrote the shared-text support for GCC.

I suppose there've been a good number of other little things along the way, since I first bought an ST in '86. Porting Arc was my original claim to



Figure 2: GEM Desktop using Letter Gothic 12 Pitch Italic Bold. A bit challenging to read!

Figure 3: AES 4.10 showing three iconified windows, and a replacement font in the directory window. The button with the triangle at the top of the window shrinks it into an icon. Clicking on the iconified window pops it back up into a window again.





fame, I suppose, and then there was my less than user friendly port of KA9Q TCP/IP in '87. I was a full time student at the University of Michigan, Ann Arbor, back then. In '88 I became a full time employee there, and that's when I brought the Atari archive at Umich officially online.

The GCC work dragged out over a number of years; I last touched GCC 2.6 in 1992 while working at the Jet Propulsion Laboratory in Pasadena. I've kind of faded from the hobby programming world now, my last piece of real Atari work was the BlackMail voicemail package for the Falcon, which I haven't touched since '94. Hard to believe how much time has passed.

Nowadays I program Unix, DOS, and Mac fileserver code at Locus for a living, and mainly use my Ataris as a plain ol' end-user. I optimized the MiNT fasttext driver, tinkered with other things, and added a couple new system calls to support my BlackMail project, but now I mainly run Cubase to create new music arrangements for my Celtic band. I run AtariWorks for day-to-day stuff. One of my Falcons is on 24 hours a day, answering my phone for me.

Probably more than you wanted to know, but what the hell. Take it easy."

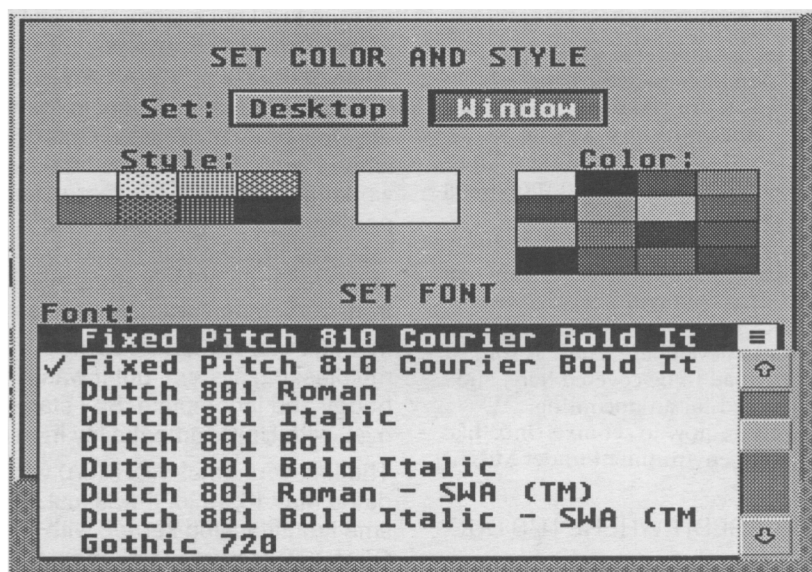
More modestly, Jahwar Bammi supplied the following:

"I ported many GNU tools/utilities/programs during the years 1985 through 1990. During this time I studied at Case Western Reserve University to get my PhD."

## STAY TUNED...

*There's much more to cover yet. I'd like to examine how the MiNT project is continuing in the next installment, and to provide a list of Internet resources for MiNT & MultiTOS.*

*Until next month, hang in there, and keep those keyboards warm!*



Caption 4: The new 'Set Color and Style' dialog, with the font selections opened. The 'Window' button must be selected to enable font modifications.

## The University of Michigan Atari Archive

Howard Chu mentioned in his posting that he set up the Atari Archive at the University of Michigan. For many years, this has been the the best archive site for Atari freeware and shareware on the Internet. Howard deserves plenty of credit for this central location which, among other things, has always maintained the latest versions of MiNT, the GNU development tools, and all sorts of demos, applications, and utilities that would otherwise be very hard to find!

A handy program Howard wrote provides a weekly update of new programs in the archive, which is posted to the Usenet newsgroup comp.sys.atari.st. Look for a subject line starting with "Weekly Update of New..." and you'll see it there.

The University of Michigan

archive system also provides programs for the Mac and PC, among others, and has become popular to the point where it's difficult to find an open connection before 3AM. For this reason, some other sites, called 'mirrors', are a better bet for accessing all of these stored files. Here are the URLs for the Atari Umich Archive and some of its mirror sites:

ftp://atari.archive.  
umich.edu/atari  
ftp://wuarchive.wustl.  
edu/packages/atari  
ftp://src.doc.ic.ac.uk/  
packages/atari

Once you have connected to these sites, the MiNT goodies are in the 'Mint' directory. The first letters of directory names are capitalized for easy recognition.

If you attempt to ftp to the Atari Archive and it's too busy, it will provide a list of several mirror sites although not all of them contain the Atari files. ▲



hardly hear it. Now play the same tone louder. Do you hear it? It's not only the volume that changed. The intensity of sound production greatly influences the color. Blowing, hitting, bowing and shaking an instrument harder or softer gives dramatically different sounds. When trying to imitate these changes one samples the instrument at different volumes that produce typical timbres and assigns them to different ranges of velocity.

In MIDI terms the speed of a key struck is called velocity which is similar (but not identical) to the volume. Volume is simply how loud or soft something sounds (it's amplitude), just like the volume button on an ordinary radio or TV. Volume is normally controlled at the output level. Velocity is also translated into a numerical value and is measured, if available, at the output (see my article in last month's issue about how to find out from the MIDI Implementation chart whether your keyboard transmits Velocity Messages). Velocity can recall changes other than loud-soft types. The amount of slapping in a slap guitar sound, the hardness in an Electric Piano sound, the metallic twang, the attack time in some pads, etc., may be controlled with velocity. The third criterion I mentioned, the method of sound production, is an entirely different story. Plucking or bowing a stringed instrument, playing a trumpet with or without a mute is more than a keyboard can handle. Incorporating these effects would mean taking other, standard, more important features away.

The only addition commonly used is called modulation. It is normally controlled by either the upward motion of the pitch bender joystick or it may have a separate wheel. Modulation is a regular Control number in the MIDI specs. It does what it says: modulate the sound. Usually it means adding a wide vibrato or tremolo. Vibrato is a rapid, repeated, alternating pitch while tremolo is a rapid, repeated, alternating volume level. For some sounds the results are usable if a brass or distorted guitar shake is normally used on those instruments. The newest keyboards go a step further. Modulation is applied, whenever possible, so that it imitates a special effect on the instrument. The results are rather convincing in some cases; the growling of saxophones, overblowing on the flute, the brassy sound of a trumpet section and harmonics on a stringed instrument are a useful addition to the wonderful world of MIDI.

I observed another tendency of MIDI sound sources. Gear from a couple of years ago featured a large number of rather artificial sounding synth-type sounds. Almost half of the sounds in older synths had poetic names like 'Metal Wizard', 'Space Trumpet' (Trick question: Does sound travel in outer space?) or 'Magic Carpet'. Within General MIDI devices, only about 1/4 of the sounds can be considered 'unnatural'. There is a very clear trend toward good quality imitation sounds. Even keyboards featuring hundreds of patches, elaborate on variations of existing instrument sounds, such as different combinations of brass sounds from solo to group, jazzy stabs, mellow pads, orchestral brass to Latin wailers; the list goes on. This tendency can be explained with the pendulum nature of human behavior.

#### *A Little Note On RAM*

*It took long enough, but the bottom has finally dropped out of RAM prices. In Toronto, anyone can purchase 4MB SIMMs (72 pin) for about \$47Cdn (\$36US). That's cheap. Larger capacity SIMMS are even cheaper per MB.*

*Atari/TOS/GEM loyalists will also find that the cost of 30 pin SIMMS is dropping rapidly.*

*Remember that if 30 pin prices are not dropping in your area, it's a simple matter to purchase a 30 pin to 72 pin adaptor. Your computer case/shielding might need some modification, but the savings might be worth a little judicious cutting and bending.*

*There are a couple of problems to watch for however, in the midst of all this low priced RAM.*

*First and foremost, try to stick with brand name RAM. Buying no-name RAM instead of Siemens or Sumitomo (for example), may save you \$20 on 8MBs, but there's no guarantee that the no-name 70ns RAM really is 70ns. While some 100ns RAM will work, phantom problems later on could drive you nuts.*

*The best solution is to purchase from a dealer you know. There are off-brand and no-name chips out there which offer a better price break than the name brands, and provide the same quality. A busy, reliable dealer will know which is which. He'll also be able to identify the grey-market garbage which carries phony brand names.*

## **Solutions?**

In order to keep our interest focused on anything there must be a balance between novelty and repetition. If something is too familiar, we get bored. If there is always something new, our brain loses track, focus, then interest. I don't like most of the new musical comedies, a genre for which I have a great affinity, because there are few really memorable tunes that I can whistle along with everybody else when leaving the theatre. Similarly, composers, arrangers and performers know by now pretty well what sounds they can count on: non brand or model specific, unique and not particularly transferable. It is the same when you first get a computer. You go through lots of programs, you buy a lot of things that look interesting, but you end up with a personally chosen, essential software package that you don't leave because even though other programs may offer more, your choice genuinely fits your own specific needs and limitations.

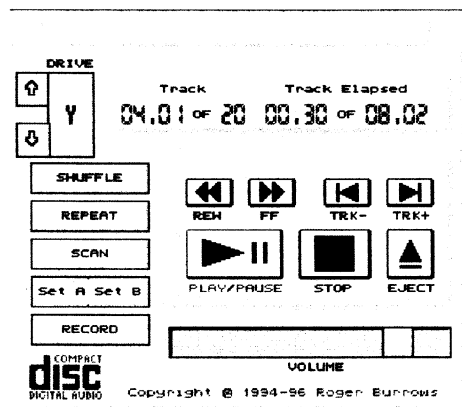
## **Conclusions?**

My advice for people who are looking for gear to buy (particularly used equipment), is to take a good look at the features and make sure the synth has everything you really need. Then browse through the sounds to see whether they give you a good variety. Don't get carried away with excellent 'goblin factory' sounds. Listen for sounds that are accurate to your ear: a piano, brass or strings, and guitar. Compare your specific needs with the actual sounds. It is also a good idea to develop a set of tunes, themes, chords, etc. that are particular to a specific sound. I usually play Clarinet Polka to test the clarinet sound, The beginning of In the Mood for the sax section, Mozart's Alla Turca for the Harpsichord, etc. Using this "Standardized Neutral Original Testing" or SNOT, I can evaluate sounds in their 'natural environment'. Go shopping outside of peak times or use a set of sealed headphones. Nothing is more unnerving than hearing five second bursts of sound from ten different directions, from ten different keyboards or other pieces of hardware, being tested by ten different customers! Good shopping. ▲

Lorant can now be reached on-line at:  
oswaldag@interlog.com

# Thinking CD-ROM?

## ... Think ExtenDOS Pro!



- ✓ The standard for using CD-ROM with Atari systems
- ✓ Easy installation and reconfiguration
- ✓ Supports a wide range of CD-ROM drives, including changer mechanisms
- ✓ Includes an audio CD player accessory/program, with direct audioCD-to-disk recording (requires compliant drive)
- ✓ Runs on all ST, STe, Mega, TT & Falcon computers (ICD Link2 or equivalent recommended for ST/STe/Mega)
- ✓ Runs under TOS, MultiTOS, Geneva & MagiC

ExtenDOS Pro is available from Atari dealers or directly from Anodyne Software

### **Anodyne Software**

6 Cobbler Court, Ottawa, Ontario K1V 0B8, CANADA

Phone: (613) 523-7498

Email: [anodyne@magi.com](mailto:anodyne@magi.com)

# RAM Gizmo<sup>tm</sup>

THE ORIGINAL  
FALCON SIMM  
BOARD!

from chro\_MAGIC Software Innovations

**FULLY POPULATED with 14  
Megs of RAM for only \$199.00**  
Price includes shipping to anywhere in North America!\*

Terms: All prices are in US Dollars. We accept Mastercard, Visa, and COD orders (COD order accepted from US addresses only). Offer good while supplies last. Due to the fluctuating memory costs, price is subject to change without notice. Please call/fax/email for latest pricing. \*Price includes ground shipping to anywhere in North America. Please call/fax/email for info on faster shipping rates and/or overseas shipping rates.

chro\_MAGIC Software Innovations  
Suggested Retail Pricing (in US Dollars):

Guitaristics \$69  
RAM Gizmo \$99  
Keyboard Gizmo \$79  
Hard Disk Sentry \$49

Pianistics \$79  
MultiSync Gizmo \$25  
Falcon A/V Video Adapter \$15  
Falcon SC1224 Video Adapter \$15



chro\_MAGIC Software Innovations  
516 North Jackson  
Joplin, MO 64801-2755  
United States

Phone: + 1-417-623-7393  
Fax: + 1-417-624-0700

Internet E-Mail Address: [jimcollins@delphi.com](mailto:jimcollins@delphi.com)



# PHOTOLINE

Photoline is "THE" program that all ATARI users have been waiting for. Photoline is a powerful & professional, truly 24bit image editing software which includes BITMAP and VECTOR toolsets. Photoline works on any ATARI machine with at least 1 MB of RAM, and all ATARI compatible operating systems, including Magic 4 and MagicMac.

Photoline is feature-packed: Filters, Masking, Text, 3 & 4 color modes, Variable Zoom, Intensity Setting, Freehand lasso, Picture Conversion, Scaling, Rotation, Brush (editable), Water-paint, Stamp, Color picker, 3D Surface Projection, Distortion, Drag & Drop, ... are just some of the features provided by Photoline.

Photoline allows editing of any image on any resolution, without any loss. It is user friendly, thanks to its GEM based interface, using in-window dialog boxes and keyboard shortcuts. It allows loading of all popular picture formats including PhotoCD and JPEG. Photoline can output to color or monochrome printers, plotters or to file.

## ATARI CD MASTER

### ATARI CD MASTER

ATARI CD MASTER is a compilation of series of drivers for popular IBM PC CD-ROMS. Most of the drivers share the following features:

- Fully multi-tasking, with a friendly user interface
- window interface (The Most recent drivers are fully 3D/color with Flying dialogue boxes)
- Pictures are viewable, in a window, in 2, 16 color, 256 color modes including on graphics cards and the Falcon
- Sound support, if applicable
- Powerful search features, with "narrow down" option.
- Multiple text windows
- Save, print, ....

ATARI CD MASTER supports the following CD-ROMS:

#### ATARI CD MASTER VOLUME 1:

- 1- TIME ALMANAC OF 1995
- 2- TIME ALMANAC OF THE 1990'S (89-94),
- 3- TIME ALMANAC 1994 REFERENCE EDITION,
- 4- UFO I OR UFO II,
- 5- SPACE MISSIONS,
- 6- 1995 AUTO ALMANAC,
- 7- MPC WIZARD V2.

ALSO INCLUDED WITH THIS PACKAGE IS AUDIO CD MASTER V4.

#### ATARI CD MASTER VOLUME 2:

##### HEALTH PACK:

##### 1- Total Health, Body and Mind

is a complete anatomy and physiology reference with pictures, animations, glossary, ...

2- Pharmassist is a complete guide to over 7000 generic and brand drugs. It is a comprehensive, information packed CD-ROM: Gives you complete details on how to take a drug, when to take it, what happens when you forget, overdose, alerts, ... contains sections on First aid, abused drugs, drug classes and much more.

#### ATARI CD MASTER, INFOPEDIA V2

- encyclopedia driver, which is the latest addition to ATARI CD MASTER.

Infopedia v2 is the 1996 edition of the 26 volume NEW Funk & Wagnalls complete encyclopedia with over 26000 articles, 8000 sound and picture clips, hypertext type linking, complete searching tools, ...



## PRICE LIST

### HOT DEALS ON NOVA CARDS: (DIRECT FROM THE DISTRIBUTORS)

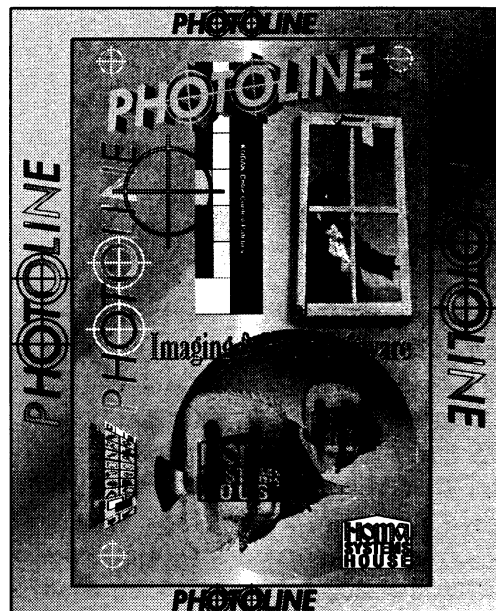
	CND\$	US\$	
NOVA PLUS 32 (MegaSTE, TT030)	515.00	375.00	(REG 455 US\$)
NOVA PLUS 64 II (2MB, TT030, FALCON)	689.00	499.00	(REG 599 US\$)

The above card, with 2MB of RAM offers 16.8M colors in 800x600, 65K in 1024x768 and 1280x1024 in 256 colors, using an ULTRA fast 64bit graphics processor. Prices have been slashed for a limited time only. Call HOMA SYSTEMS HOUSE for other configurations and benchmarks.

#### SOFTWARE SPECIALS:

	CND\$	US\$
PHOTOLINE	279.00	199.00
ATARI CD MASTER INFOPEDIA 1996 w/CDROM	85.00	62.00
ATARI CD MASTER VOLUME 1	55.00	39.95
ATARI CD MASTER VOLUME 2	27.00	20.00
MUSTEK PARAGON 6000cx, 12000cx Scanner driver	199.00	149.00
HP IICx, 3C, 4C Scanner driver	199.00	149.00
WACOM ARTPAD II Tablet driver	109.00	49.00

For more information, please contact HOMA SYSTEMS HOUSE. If you have access to internet, you may contact our WEB SITE with URL: <http://www.magma.com/~nima>



## NOVA SCANNER DRIVERS

### HP IICx, 2P, 3c & 4c SCANNER DRIVER

### MUSTEK PARAGON 6000cx & 12000cx SCANNER DRIVER

These scanner drivers support the full capabilities of the above flatbed scanners, including up to 2400 dpi scanning, and up to 24 bit color (LineArt, Halftone, grey, and 24 bit).

They have a fully configurable prescan window, brightness and contrast setting, gamma correction, scaling, inverting, and much more. The drivers run as a stand alone program or accessory and can be used to scan directly into programs via GDPS (such as Photoline, Pixart)



## WACOM

### WACOM ARTPAD II graphics tablet driver

This driver can be used with the revolutionary WACOM ARTPAD II with erasing ULTRAPEN graphics tablet, which also offers erasing and pressure sensitivity (within supported applications), amongst the usual features.



## NOVA GRAPHIC CARDS

### NOVA GRAPHICS CARD

Nova graphics cards are the most compatible and affordable graphics cards in the market. These cards are available for TT030, Falcon030 and MEGA STE, and offer you 64 bit performance in a blazingly fast resolution of up to 1280x1024, in True color (24 bit).

There are several combinations available such as 32 bit & 64 bit, and 1, 2 or 4 MB of DRAM and VRAM.



HOMA SYSTEMS HOUSE  
P.O. Box 52127, Ottawa,  
On., K1N 5S0, Canada  
TEL : (613)-722-0901  
FAX : (613)-722-9061

#### EMAIL

Genie: NIMA

Internet:

sa414@freenet.carleton.ca  
nima@magma.com



## ***I CAN'T STAND THE WAITING!! IT'S KILLING ME!!***

***Contributor Jeff Wisniewski has a look at iPRN . . . the latest, greatest, printing speeder-upper . . .***

***We all know that TOS leaves a lot to be desired with minor (and some not so minor) bugs and slow routines that could have been optimized with each new version of TOS that Atari has released to the public. But since some of these routines were not improved the door was left open for other programmers to improve upon the old routines by writing new ones and making them available to the public.***

iPRN II is a great little Shareware program that will speed up the original printer routines in TOS, thereby giving you more time to actually use your computer instead of waiting for it to finish sending your data to the printer.

Below is a small table that shows the speed increase with three types of documents: 1 page of text, a Pagestream document, and an IMG file printed from PicSwitch 1.01. All times are listed as seconds. As you can see, there is a significant decrease in the amount of time needed to print anything with iPRN installed.

File type (Format)	File Size in Bytes	Print time w/o iPRN	Print time w/ iPRN
Plain text	3,275 Bytes	4.00 sec.	00.79 sec
Pagestream	17,820 bytes	240.00 sec	83.00 sec
Body.IMG	50,180 Bytes	104.50 sec	19.85 sec

iPRN II is very easy to install and only uses 5K of memory. It is composed of two basic parts: a small program that goes in the AUTO folder, and a CPX module for your CPX folder (please note that the CPX is ONLY included in the registered package and not the demo). The position of the program in the AUTO folder IS very important – it should be LAST in the AUTO folder unless you are running MiNT in which case it should be positioned before MiNT.

Since this is a Shareware program, there are several limitations in the unregistered version of which you should be aware.

- Upon boot-up, the program display a dialog box and asks you to enter 'iPRN II' and hit the Return key to install, otherwise the installation is bypassed.
- Only your first printout is accelerated, all other printouts will be at the normally slow TOS speed until you re-boot your computer.
- No CPX control module. Read further to see why you need this

CPX module to get the most out of iPRN's extensive features.

– Printer State Tracking only works once per computer session. After your first printout, you are back to using regular TOS to print. See below about this excellent feature.

The CPX module permits control over three program configurations: Off-line Time-out, End-of-Job Delay, and Printer State Tracking.

– Off-line Time-out: Here you can set the maximum delay in seconds before the printer is off-line for whatever reason and the error is reported back to the application program. This is set to 45 seconds in the demo version – long enough for me to turn on my laser, let it go through it's warm-up cycle and still not have the computer time-out with an error.

– End-of-Job Delay: Is the length of time, after the last item is printed, that the printer can be off-line without generating an error message. It's set for 2 seconds in the demo version.

– Printer State Tracking: The program keeps track of the printer state. Either on-line, off-line, or in an error state. You can disable this at any time with the CPX module.

There is also another small (but good) feature of the CPX module that I cannot test (only because I do not have a Desk-Jet printer): clicking on OK or SAVE is suppose to wake up HP Deskjet printers.

One of the features of iPRN-II that I especially like is what the programmer calls 'Printer State Tracking'. The program keeps track of the printer state, either off-line, not turned on, no paper, or some other error. If for some reason the printer is not ready to receive data, the error message appears instantly instead of after the normal 30 second delay with TOS 3.06, if you have an older TOS version the delay is even longer.

In the event your printer runs out of paper, toner, or whatever, iPRN will not allow any data to be lost until the time limit expires in the Off-line Time-out setting. This allows you to add paper or to correct the printer error without having to re-start the printing process. Just make sure that you can correct the problem before the time-out setting expires or you will end up with lost data and have to re-print, please note that this is a problem with TOS and not the iPRN program. TOS will now return the actual number of bytes that was printed; this will let you know if a print error has occurred or not, but it's only useful if the application that did the printing checks for this and allows you to re-print what was missed.

iPRN works with GEM-Spool, GDOS, Speedo, G+Plus, and did not cause any conflicts that I could find with my normal setup which includes the following programs: Data Diet, Data Rescue, Warp-9, NeoDesk IV, Geneva, Multidesk Deluxe, Maxifile, Freedom, Steno, Pop-It, Cardfile, CodeKeys, UIS, and Extendos among others. (Ed. Note: we've found that iPRN has few, if any, serious incompatibilities. We did spot tests on a variety of machines, including Falcons, TTs and Megs).

All in all, this is one of the programs that will always have a



place on my system and I will probably even forget that it is up and running. The Shareware Registration fee is only \$20.00 and it's well worth it in my opinion considering what iPRN does (or can do) for you.

Please note that your speed improvements will vary depending on which computer you have, which TOS version, type of printer, what you are printing (text or graphics), and of course which software you are using to print.

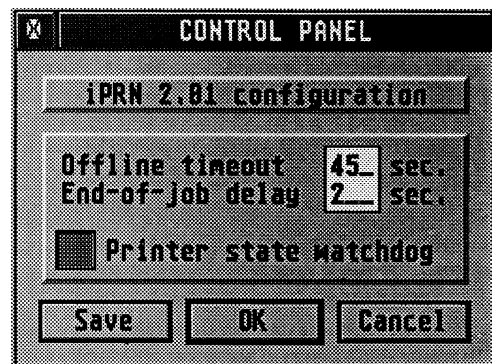
This program was tested on the following equipment:

TT030, TOS 3.06, 4 Megs ST Ram and 4 Megs TT Ram, 48MHz CaTTarmaran accelerator, HP LaserJet-IIIp with 5 MB Ram.

Programmed by:

Peter Missel Stadtparkasse Augsburg BLZ 72050000 Kto. 1301522

Registering iPRN is possible through Danny Bhabuta's excellent Shareware Registration Scheme. Contact: dbhabuta@cix.compulink.co.uk. (Ed.Note: Jeff Wisniewski has his own rather extensive Shareware Registration Scheme in the U.S. Contact Jeff at: dragons-egg@genie.com or jefferey.wisniewski@microserve.com ▲



## ***What else is out there? Glad you asked!***

*Because TOS routines have provided a little slow-print grief over the years, a variety of solutions have sprung up. Chief among the commercial solutions is a little item called Outburst. It's highly configurable, fast, works extremely well with Calamus SL and HP Laser printers (although the inkjet and bubblejet owners will benefit too). Most dealers carry Outburst. We'll be reviewing Outburst in a coming issue of Current Notes. Among the Freeware and Public Domain software solutions you can have a serious look at two little programs: FREDWEST and FASTPRNT. Both are available from BBS file areas and ftp sites everywhere. We recommend you try Fredwest first. Happy, speedy, printing!▲*

# **TAF Libraries by Mail**

*Miss the meeting? Long-distance TAF member?  
Do you need great Atari, TOS/GEM  
Shareware, Freeware & PD software?*

**Per Disk:**  
*ST/STe/Falcon disks - \$6 for members  
\$8 for non-members  
XL/XE disks - \$3 for members, \$4  
non-members. Make all checks out to:  
'Toronto Atari Federation'*

**Send \$5 for a disk catalog  
or \$6 for a print catalog!**

**Send your Check or M.O. to:  
Toronto Atari Federation  
5334 Yonge St. Suite 1527  
Willowdale, ON M2N 6M2**



**We keep looking for things we can't find.  
Too many floppy disks and disk boxes.  
Too much cataloging. We should really  
take advantage of the help that's out  
there. Bill Johnstone has an idea . . .**

**OK.**

**Here's the problem.**

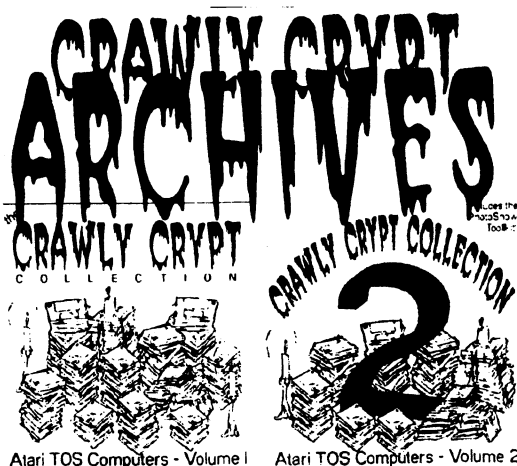
**You've been busily downloading software for about 7 years. Your floppy disk collection has grown to the point where you've got about 800 disks. The space they take up is enormous; at least 2 bookshelves. It's space that could be put to better use. You've cataloged all of the disks (which is great), but STD CAT now takes a full two minutes to boot! The task of determining whether or not you've actually got a particular program, utility or accessory has become ridiculously daunting, and despite all your efforts at organizing the huge collection you often logon and download software that you're sure is buried in your own collection!**

How'd you like to regain all that wasted shelf space, increase your blank floppy disk count to about 800, and not

lose a single archive in the process? How'd you like to do it for about 30 bucks?

It's easy. Just call your favorite dealer and order the Crawly Crypt Archives CD Vol. 1. It's a CD-ROM which contains the entire contents (compressed) of the Crawly Crypt Collection CD-ROMs Vols. 1 & 2 (which were compiled from the huge contents of the Crawly Crypt BBS).

**OK.**



Here's another problem.

You've decided to purchase one of these Crawly Crypt CD-ROM things, but you're worried about how easy it will be to find the files you need. There are hundreds (if not thousands) of the silly things.

**No problem.**

The CD-ROM is organized in obvious categories and subjects, and the file hierarchy is alphabetical. The screenshot explains a lot, with several nested directories shown. From left to right, you move from the Root Directory (P:\\*.\* ) to P:\CCC1\\*.\* to P:\CCC1\APPS\\*.\* to P:\CCC1\APPS\DATABASE\\*.\*

The Directories 'CCC1' and 'CCC2' denote Crawly Crypt Collections 1 & 2.

**OK.**

Here's another problem.

All of the files on this CD-ROM are archived. They're compressed using a proprietary method called ZIP. Until the archives are uncompressed, they're largely unusable.

Fortunately (even for users who are unfamiliar with such things), help is at hand. The Crawly Crypt publishers have thoughtfully provided an uncompressed version (the latest) of a wonderful utility program called STZIP. It can be used to uncompress anything on the CD-ROM, quickly and easily.

**OK.**

Here's the last problem.

Why bother with this CD-ROM (aside from the obvious ease with which you can find things and the fabulous saving on storage space and floppy disks)? Why can't you just download what you need, when you need it, from various ftp sites and BBS file areas?

The answer is awfully straightforward: Time and Money. The CD-ROM is very inexpensive (it's a downright bargain actually). DSDD floppy disks are getting very hard to find; you'll free up your entire collection of floppies once you pick up this CD-ROM. ISP

download time (unless you're on some flaky, hard to logon-to freenet) is not cheap, and BBS file areas are never as comprehensive as a single Crawly Crypt Collection CD-ROM, never mind this archive CD-ROM. Beyond anything else, once you've obtained the CD-ROM it will always be ready to hand; You'll never again have to cool your jets, waiting for some annoying bleep to vacate the single line going into your local TOS/GEM BBS, so that you can download what you need. You'll also never again have to wait until 3AM to get an ftp window onto 'umich' (the University of Michigan ftp site, which is a rather comprehensive Atari/TOS/GEM and MiNT file site).

The CD-ROM is useful, comprehensive, well organized, easy to

continued on p. 51

# HELP! HELP! I'M BREAKING UP INTO LITTLE, TINY BITS!

**It's Quiz Time!!**

**Let's play a little game called "What Am I?"**

**Here goes . . .**

**Read. Read. Write.**

**Type. Type. Type. Type.**

**Write. Read. Read.**

**Write. Type. Type. Write**

**. . . Read . . . Read . . .**

**Write.**

**Read. Type. Type. Type.**

**Type. Type. Write . . .**

**Write . . .**

**Write.**

**Write.**

**"What Am I?"**

**You don't know the answer? Give up?**

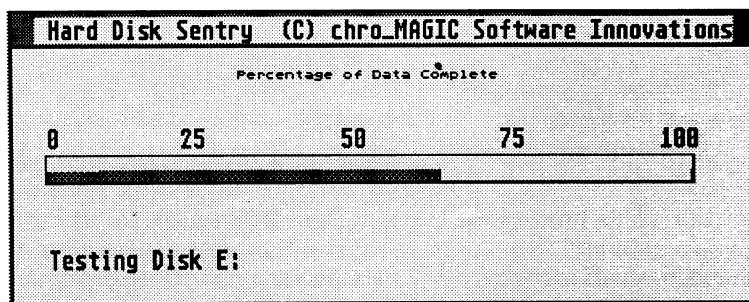
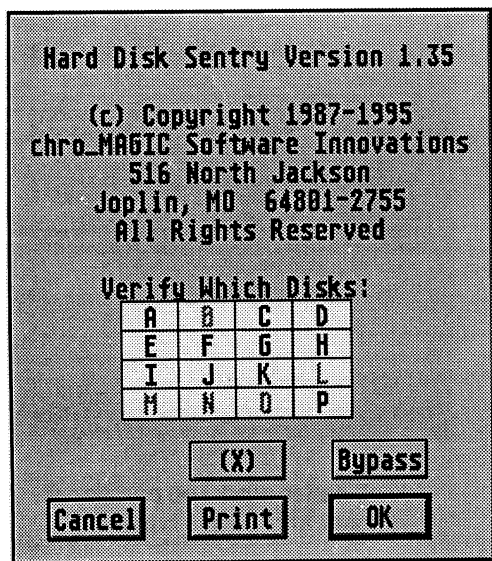
**"I'm a fragmented hard drive partition!!"**



**Steven Burris says . . . there comes a time in all our lives when breakin' up is hard to do . . . HARD DISK SENTRY to the rescue!!**

It happens. To everyone.

The problem (basically) is that most files people work on tend to grow in size. Graphics, text, documents, sounds, and so on, all represent file formats to which computer users tend to add information. Letters to friends get longer as they're completed (during the course of a couple of sessions with a word processor). Graphics tend to get larger as colors, textures, boxes, lines and text are added or modified. Sound files are edited, spliced, enhanced and re-processed, increasing their size. So what it all boils down to is the fact that the first time any of these files are saved to a spot on your hard drive, they only occupy a certain finite amount of space. If you subsequently create files unrelated to the first one, save them (and others), create still more files, copy things, move things and delete things, it is quite possible that the next time you add to the first file, the additional information will have to be stored in a part of the hard drive that is not physically contiguous with the first file. for those of you who are unfamiliar with the term 'contiguous', it means uninterrupted



Clockwise from left: Opening screen, Progress gauge screen, Reporting screen. The information provided is comprehensive, useful and comparatively easy to understand.

Total FAT clusters	18256	Bad File Clusters	0
FAT File Starts	180	Invalid FAT clusters	2
FAT File Ends	187	Chk1 collisions	0
Contiguous Clusters	312		
Non-contiguous Clusters	58		
Total Files	120	Broken Files	2
Total File Clusters	322	Broken Non-clusters	0
Free Clusters	1025	Broken Clusters	20
Recoverable Clusters	2		
Unusable Clusters	0	Total Errors	11
Unknown Clusters	0	Total Good Files	173

Status display for 80Tune 2

Continue Print



Above: Oops! Orphaned files. Sometimes they're useful, and sometimes they're just garbage. Right: Two screenshots showing different drive maps, The top drive is OK. The bottom one is a mess.

and joined together ('continuous' means ongoing). In other words, the next time you save a file you've been working on, the new information won't necessarily be saved immediately adjacent to the original on your hard disk.

Why are non-contiguous files a bad thing? The answer is simple: any file that is broken up into several pieces takes more processing time and system resources to manage. Such files also take longer to load and save (read and write). Hard drive accesses take longer and longer; File Allocation Tables (FATs) become very large and difficult for the operating system to manage; errors begin to creep into various reads and writes. Eventually, heavily fragmented disks become nearly unusable.

What's the solution? Can the situation be avoided altogether? Are there utilities to resolve the problem reliably once it has progressed seriously? The answer to all of the above is 'Yes'.

One of the most reliable utilities for hard disk management and optimization is a piece of software called Hard Disk Sentry. It's a commercial program written and published by chro\_Magic Software Innovations.

The 22 page manual supplied with Hard Disk Sentry provides ample explanations about the myriad problem which can occur with hard disks. It also provides a step by step tour through the software, with

explanations about each dialog and information box.

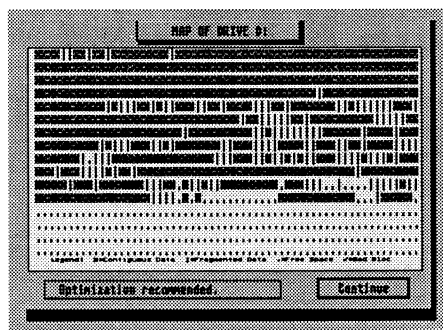
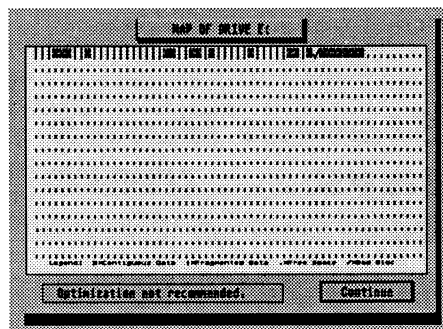
There are a couple of warnings which should be addressed before you use any sort of disk defragmentation and/or optimization software. First and foremost, before using Hard Disk Sentry, turn off any disk caches which are running and reboot your system without them. The ICD booter (ICDBOOT.SYS) contains a cache; use HDUTIL.PRG to turn it off. If you're running Atari's CACHEnnn.PRG, go into your Auto Folder and turn off the cache. If

from some regular maintenance using Hard Disk Sentry. Newer SCSI drives (almost anything manufactured during the past few years) suffer from far less slowdown because of data fragmentation. The newer drives are so fast that even heavily fragmented drives often don't have any material effect on the apparent speed with which files are read and written. You should (at the very least) have a look at the state of older drives every month, especially if you frequently read and write larger files (in excess of 100KB each). "Frequently" in this case means several times per day.

Newer drives can benefit from an observatory peek once a month as well; just remember that a half dozen fragmented files is no reason to optimize the entire hard drive.

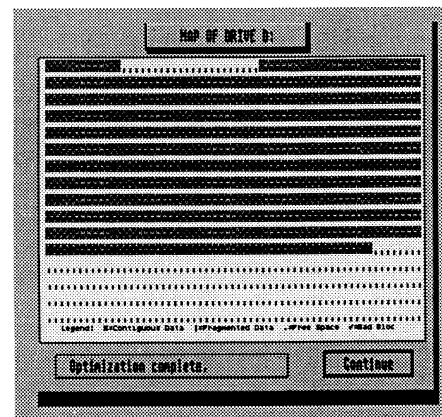
The last (but most important) warning is that you should always back up your hard drive (or at least the partition you want to defrag or optimize). Orphan files often cause headaches; they are files for which there is a series (or chain) of data clusters in the FAT, but no directory entry referencing the file data. The data is there but the file name has been lost, in other words. As with all hard drive software of this genre, Hard Disk Sentry will create a directory in which it will put all of the orphaned files it finds. Most orphaned files are the result of failed

continued on p. 51



you're running TCACHE.PRG or any other similar program, turn it off. The data you save may be your own. Because Cache programs store sector information, there is no guarantee that Hard Disk Sentry (or any of its rivals) will be able to read all of the data necessary to create contiguous files out of fragmented ones. In such a situation (with an active Cache), precious data might never be properly appended to fully complete particular files.

There is something else you should be aware of: older hard drives (Megafiles, Supras, 5 year old SCSI drives, IDE drives from STacys and even a few older Falcons) will benefit



... all better now! The partition is faster and TOS is happier!





# GIVE ME FREEDOM!

## Freedom from the old TOS File Selector that is . . .

### Dan Dreibelbis examines an amazing enhancement to almost any system . . .

## The Freedom File Selector

*One of the great mysteries about Atari's in-house programmers was that while they made various improvements in successive versions of TOS over the years, adding convenient new features and improving its performance, they never got around to creating a great file selector. Don't get me wrong, the existing file selector was one of the nicest features of TOS, but the little box hasn't seen improvements since TOS 1.4, when the ability to switch between drives via mouse clicks was added.*

Over the years many third-party programmers in both the commercial and the PD/Shareware world have gone about trying to improve upon Atari's file selector, adding user-friendlier features and new functions that made them stand-alone programs in their own right. These range from Charles Johnson's Little Green Selector to Boxkite to Universal Item Selector III & Selectric! (popular choices for many die-hard Atarians). Gribnif got into the act too, and designed a special item selector for the Geneva multitasking environment that knocks the original back a couple of city blocks, as far as features and power are concerned.

It all leads to the item at hand: the Freedom File Selector, currently at version

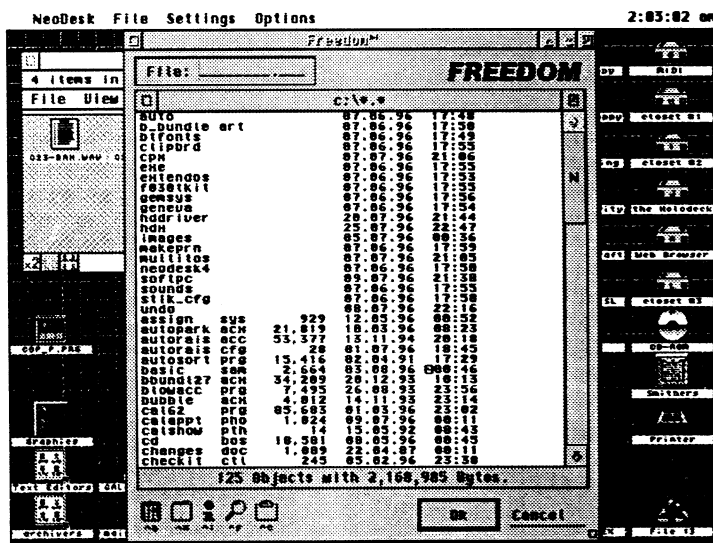
1.15. Designed by German programmers Christian Kruger and Kolja Koishwitz, this product differs from all the others in that it is designed to be non-modal. In other words, when it's used in a multitasking operating system like Geneva, MiNT/MultiTOS, or Magic, it will not freeze the system when it's called up. System operations and background programs can proceed (or continue) without grinding to a halt. Not even Geneva's own file selector can offer that! There's much more to this thing though.

### SETTING IT UP

You can download the latest version of Freedom from a local BBS or FTP site, or purchase it from your favorite PD library. This version, while many of the features are intact, has other features locked out. Registering the software will get you a key file which, when entered into the included REGISTER.APP program, will unlock Freedom into the full version.

Freedom consists of two parts, an AUTO folder program that reserves a 'cookie' at bootup for hooking into the operating system, and the FREEDOM.APP program for the main part. You have the choice of running FREEDOM.APP as a background application via installation on the desktop so it installs itself at bootup or, by changing the program's extension to ACC, running it as a desk accessory. If you have a spare slot in your desk accessory allotment, or are running a multitasking system that allows more than six accessories, this method is preferable as it will allow you to call up the selector at will from within any GEM program.

Actually configuring the many appearance and function options of Freedom requires you to load its configuration file (FREEDOM.CNF) into a text editor and change a number of entries to suit your taste and usage habits. Although British shareware registration agent Joe Connor has done a superlative job translating and explaining what each

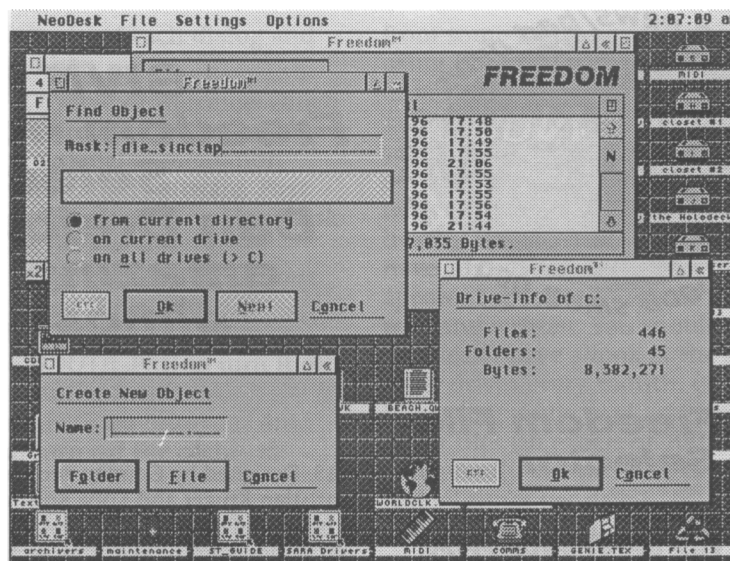


configuration string does (in English), actually doing the modifications seem rather daunting, especially in light of the many configuration options on offer. These include designing the actual physical width of the selector, what style and point size of font to use in the window, list file size and time of creation, what colors to use for the text and background, setting up Function Key macros, enabling the use of the file copy utility Kobold with the selector, whether small pictures should be used alongside file names to identify their file type, and much more. Whew! I wish the programmers would develop a configuration program that required less head-scratching. Currently, it's more of a trial and error exercise, seeing what works best for you. It's not difficult, merely tedious (Ed.Note: we recommend using the defaults to get started). Once you're finished, don't forget to make the configuration file 'Read Only'.

## IN USE

One of the things I love about Freedom is the fact that it is so flexible when it comes to using the mouse. There are a number of ways to utilize particular functions just by clicking on them:

- clicking the scroll gadget with the left mouse button allows you to scroll up and down the current directory just by moving the mouse.
- clicking the scroll gadget with the RIGHT mouse button brings up a menu allowing you to sort the files in order by name, size, date, or suffix; you can also choose to list all the items in reverse order.
- clicking on the arrow buttons above and below the scroll gadget with the RIGHT mouse button will automatically take you to the top or bottom of the directory.
- clicking on the system path section brings up some interesting results: clicking on the drive letter will open a window listing all the available drive paths; clicking on the folder path will list all the current folders in the directory you are in; clicking on the file type entry will list the extensions of all the file types in the current directory, choosing one will display only those files in the window.
- Clicking on the system path drive letter with the RIGHT mouse button will list a number of preconfigured paths; right clicking on the file type in the path will call up a list of preconfigured files to pull



up (this all requires configuring within FREEDOM.CNF). Up to 40 paths can be configured. Click on any of them, and there you go! As with the superb FASTPATH, it's the fastest, most efficient way to get where you're going.

- there's a grow gadget on the upper right hand side that will allow Freedom to grow to the height of the current resolution, thereby allowing more files and folders to be viewed without having to scroll as much (another gadget at the bottom right allows you to tailor the height to your own taste); a 'roll' gadget that allows you to shift through and bring to the top any other windows in programs or on the desktop currently open; an iconify gadget that will allow you to shrink Freedom to an icon on your desktop and call it back up just by clicking on it (I couldn't get this last one to work).
- the lower part of the window has a listing of how many files there are in the window, or how many files have been selected, and how many bytes they take up; clicking on this with the left mouse button tells you how much space is left on the current drive.
- there are more icons on the lower left corner of Freedom. They consist of a Delete function, a Folder/File creator, an Information listing, a Search function, and access to the Clipboard.
- here's where it gets REALLY interesting! Freedom allows you to take the entries within its window and drag and drop them for a variety of functions: copying to the clipboard,

deleting, finding information on the file in question, and copying the file to another folder inside the directory you're currently in. In desk accessory mode, you can call up several Freedoms at once (up to eight depending on system memory) and drag and drop files between them to different paths!

- Freedom will also denote which files had been created that day by placing a little clock symbol beside the file name. A very nice touch, and handy for a cursory search for that new file.

## WHAT ELSE?

Freedom also will give you new alert boxes in 3-D mode design, and also lets you to assign 'hot keys' for them. Anybody familiar with 'Let 'em Fly' or the alert boxes used with Geneva, will know what I'm talking about. For some reason though, the far right button does not have the right look to it; there may have been something I missed in FREEDOM.CNF?

Another nice feature is reserved for users of MiNT. If you install the Minix kernel along with MiNT, and configure a Minix partition on your hard drive, you can have the use of long file names within Freedom. No more having to figure out creative new ways of describing your file or folder in eight letters or less! Unfortunately, I currently don't have enough drive space to spare, and am not enough of a MiNT guru to actually try this function. I wonder, though, if Freedom offers this feature when used with MagiC 5 (which also supports the use of long file names).



## PROBLEMS

I tested Freedom to death on my system for more than a month and managed to find a few problems. One problem occurs after calling up Freedom from within certain GEM programs: the window belonging to the program in which you're working disappears when Freedom pops up! This bug has appeared in only two programs so far: EditPlus and Diamond Edge (I rely on Edge weekly to optimize my hard drives). It's very disconcerting when you're trying to find a reference in the application from which you've called Freedom and there's nothing to read! I have been able to fix the bug by configuring these programs to run in singletasking mode under Geneva. The work around is obviously not acceptable if you require these programs to run in multitasking mode (running EditPlus as a capture & type-ahead buffer alongside STalker, for example). It's something the programmers should

seriously look at fixing for the next release.

Otherwise, Freedom appears to behave itself very well and runs smoothly in both multitasking and singletasking environments. Its folder creation and search functions have come in handy while deep in the middle of programs (while on-line with STalker and need to find a file to upload, or with STik/CAB and have to find a path to which I can download a file).

## CONCLUSIONS

I rather like Freedom. It's sophisticated, handy, useful, and full of unique features. It's actually quite fun to use the mouse to call up all the neat functions. The problems with disappearing windows in a couple of GEM programs do have to be sorted out, and the configuration setup could definitely be streamlined. But for the

most part I consider Freedom to be an essential part of any Atarian's basic setup, whether multitasking or singletasking; it's definitely a piece of software you've got to try out! Don't forget to register it if you like it (you'll find the demo has several features disabled).

System used for this test: 14 megabyte Falcon 030, running Geneva/Neodesk4, NVDI 3.02, IDE and SCSI hard drives with AHDI driver software (later HD Driver v5.x), NEC internal SCSI CD-ROM unit, SVGA monitor (Ed. Note: we also performed backup tests on a Rev 'A' and Rev 'G' TT, a TOS 1.04 STfm, and a TOS 1.62 STe).

Register Freedom via Joe Connor's Interactive Shareware Registration scheme. Contact Joe at 'jconnor@cix.compulink.co.uk'.▲

continued from p. 46

use, and above all else contains an awful lot of good software! Try it! The CD-ROM is published by Crawly Crypt Corporation. The Crawly Crypt Archives Vol. 1 is available from TOAD (800-448-8623), Computer Direct (800-547-9203, Systems for Tomorrow (800-875-4943), chro\_Magic (417-623-7393), It's All Relative (314-831-9482), and most other dealers.▲

The screenshot on the right shows how this great CD-ROM is organized.

P:\*.*	P:\CCC1\*.*	P:\CCC1\APPS\*.*	P:\CCC1\APPS\DATABASE\*.*
848402 bytes used	0 bytes used in 1	0 bytes used in 10	2513066 bytes used in 37 items
CCC1	APPS	DATABASE	ADBS145 ZIP 31089
CCC2	BBS	DESKTOPS	ADRBK14B ZIP 30804
MASTER	CRM_DEMO	EDUCATIN	ADRES181 ZIP 275514
PSP_TOOL	FALCON	HOME	AUDIO ZIP 13738
STZIP26	GAMES	MATH	AM_RCPBK ZIP 2894
SYSOP	GRAPHICS	MISC	AM_VCR ZIP 3730
AUTHORS DOC	MAGAZINE	SCIENCE	BDB13 ZIP 62704
CCC1 LST	PROGRAM	SPREAD	BORGANIZ ZIP 37150
CCC2 LST	SOUND	TEXT_ED	COCKTAIL ZIP 81816
README 1ST	STE	WORD	COLLECT ZIP 28030
REGISTER DOC	TELECOMM		COMIK ZIP 34736
	TT		DACAP11B ZIP 213978
	UTILITY		DATAHAND ZIP 42541
			DATALOPE ZIP 42426
			DBLIB_ST ZIP 166583
			EASYDAT_ ZIP 156519

continued from p. 48

file deletions. Chain collisions (where two different series of data point to the same cluster) and bad file endings (where a chain ends at an invalid cluster), are situations where analysis and repair, and subsequent defragmentation and optimization, could result in the loss of important data. Always do your backups before horsing around with any hard disk utilities.

Hard Disk Sentry is easy to use. The interface is simple. The manual is easy to follow. We'd like to see things like '(x)' and 'bypass' become automatic, internal routines however; they are selections which permit Hard Disk Sentry to allocate more RAM for itself during difficult and extensive optimizations or defragging

jobs. We also thought it was odd that the TT-RAM bits aren't set; they really should be preset. We'd also like to see Hard Disk Sentry in a window (or at least a non-modal dialog box), and we'd like to see the 'Print' command send a Form Feed. None of these quibbles in any way affects the speed, accuracy or usefulness of Hard Disk Sentry. It works quickly and unobtrusively, gets the job done, and then exits without any fuss.

Hard Disk Sentry has a couple of features which really can't be found on any other software. The 'Write Gap' setting is fascinating, for example. A write gap is simply free space left after the directories and before the file data; an optimally sized write gap allows new files to be

written very quickly, and Hard Disk Sentry provides several choices. It's easy to set: use a smaller gap (250KB or 500KB) if you normally work with a few small files (a dozen <100KB files per day), and a larger write gap (1000KB or higher) if you normally work with lots of larger files. The Disk Surface testing program (DT.PRG) works flawlessly and reports far more accurately than similar utilities supplied with hard drive formatting and partitioning software (ICD, AHDI, HDDriver, HuSHI, and CBHD).

Try it. You'll like it. The price is right and it's available from all dealers or directly from chro\_Magic. Call them at 417-623-7393 or e-mail them at 'jimcollins@delphi.com'.▲

# letters: fun, opinion, anger, technobabble, questions . . . and a few answers

## New, Old, Older, Newest

### Managing Editor Current Notes:

*I enjoyed talking with you on the phone the other day, and I look forward to seeing those reviews of the Panther ISA bus adaptor, the DirecT40, and the DirecT60 in Current Notes.*

*Also, I wonder if you will be saying something about the high-speed serial port fix for the ST, such as what it's all about, what gets fixed, what the ST will do after being fixed, can any klutz do it, etc.?*

*And here's a question for somebody from the past. I have Spectre GCR V3.0, which I have never used, but might install one of these days on my Mega. However, since I recall that it was never updated to be System 7.0 compatible, I think that getting it operational would have somewhat limited value, depending on my desires. Do you know if V3.1 ever became available through some secret underground? V3.1 supposedly was going to be System 7.0 compatible. It was apparently held up by Dave Small's legal diversions. Dave had an article in the last issue of Current Notes published by Joe Waters, in which he claimed that he would soon resurface as Specific Impulse, Inc. (SPI). That was a year ago. Any signs of SPI? In many ways MagiC Mac has stolen the thunder from Spectre GCR, but a GCR that would handle System 7.0 would still be useful to me.*

*Finally, you encouraged me to share my phone comments about Freedom From Cyberspace. So here they are:*

*I have previously communicated with you about my dismay at the new policies applied by the new ownership of Genie Online. Genie was basically unresponsive to my complaints last March and April about their new subscription packages and their illegal retroactive billing of my account at a rate higher than the old one. Moreover, they had not provided adequate advance warning to subscribers about the rate hikes. So, I refused to pay the added fees, cancelled my Genie*

*account, and I have not signed up for another on-line service. Now I am free! Free! Free! No more need to check my e-mail every day! No more compulsions to send e-mail! No more rummaging through Round Tables and Libraries for stuff! Now, when I come home from work in the evening, I do not feel a need to turn on my computer. Peace at last! Actually, I do sort of miss the availability of the Round Tables and the Libraries, but I am too busy with my normal life to be investing much time on-line. I do regret the loss of Aladdin mind you; it's a great interface for Genie users, and I do miss the occasional e-mail communications with fellow Atarians and other friends around the world. So one of these months I will probably sign up for something else. Perhaps CompuServe. Perhaps the Internet, if I can find a truly inexpensive provider (since I spend minimal time on-line).*

*Don Wilhelm, Menlo Park CA*

**CN: Last things first . . . while we agree with you about Rovel Renaissance Corporation's initial ham-fisted approach to customer relations, we'd also like to point out that you'll find better deals from 'real' ISPs in any event. GENie (and then Genie), never had the internal structure to handle the sort of crossover access it wanted to implement. Genie is improving its internet access as we talk (write?), but they've got a long way to go; AOL they're not! General Electric had a huge telecommunications infrastructure (WAN) which was costing the corporation a lot of money, and which was being severely underused. So they decided to open a commercial on-line service to lay off some of the costs associated with carrying their worldwide network and GENie appeared as a result. A lot of the infrastructure did not age particularly well however, and it was hard to upgrade.**

**We can't comment about Dave Small's current whereabouts. While we agree with your comments about the limited value of System 7 compatibility, V3.1 of Spectre GCR was never anything more than vaporware. Whatever tragedies befell Mr. Small, there is no gainsaying the fact that Spectre's corporate planning, financing, development and budgeting left more than a little to be desired. Spectre (and Gadgets by Small) was destined to fail in the market for reasons that had virtually nothing to do with litigation or family difficulties.**

**The ST Serial Port Hardware Modification was published in ST Format (no longer publishing) and ST Review (also no longer publishing). We've had a few requests for the information and as a consequence we're going to publish our own version of the upgrade/fix. Look for it in the Sept/Oct issue of Current Notes.**

**We're excited about our upcoming reviews of the Panther ISA adaptor and the DirecT60. Both products are brilliant pieces of work. the DirecT60 was previewed at the MIST Atari Fest in Indianapolis in July. It is one of the fastest PCs we've ever seen and absolutely the fastest TOS-box we've ever seen.**

## Thank You, Thank You!

### Dear Current Notes:

*First I'd like to express my praise for the new Current Notes. Where the old magazine had mostly hobbyist and amateur writers, it is really encouraging to read articles (now) by computer using professionals who are able to compare the best of the Mac and PC worlds and still tell us that top-rated Atari/TOS/GEM software and hardware still outperforms the best the others have to offer. I also really enjoy the collective wisdom shared with us on non-hardware specific issues such as home office, consumerism, and how philosophy of life impacts our hobby (and professional) lives.*

*David Barkin's features fascinate me and anything he can provide to help me select and use photo processing software and*



hardware will be appreciated. It's nice to see Nathan Potechin in print. I'm sure his focus right now is on generating enthusiasm for MGI Software and MGI Calamus, but I'd really like to read some of his war stories and anecdotes about selling Atari products in a PC/Mac world and why he thinks we weren't successful. Some tips on how you achieve the special graphic effects in each issue of Current Notes would be nice too.

I really enjoy Lorant's MIDI column. Having an Arts School teacher writing this column is really helping me to bridge the gap between my Humanities education and computer hobby. It would be helpful to me to get some beginning tips such as comparing software packages and how to get started programming my Roland for multi-timbral work. Some advice on scoring and importing General MIDI files would also be welcome.

John Kolak, West  
Sacramento CA

**CN:** We're glad you're getting the most out of your subscription. We're also grateful for the suggestions and we've passed your thoughts on to Nathan and Lorant. They'll take everything under advisement of

course, and try to work the best of all the suggestions we receive into the articles they have planned.

Dave Barkin will continue to provide superb coverage of the best of what's going on in DTP and Image Processing. His article/review of Photoline this month is a terrific piece of work.

### **So THAT'S how he does it!**

Dear Howard/Current Notes:

Thank you very much for the interesting issue. I really enjoyed reading the text editor review.

I'm sure you'll be interested to hear that there is no illegal code in Everest (I hope!). The trick which prevents cursor overrun is absolutely legal and consists of 100% GEM AES calls. It works on any Atari-like operating system and has never been changed, although the operating systems itself has been improved (changed).

Keep up the good work with your magazine.

Oliver Schmidt Everest Author, Eutin Germany

**CN:** One of the best things we ever did was register Everest shortly after Oliver Schmidt took over development from Oliver Scheel. Schmidt has been an excellent source of support and continued program improvements and upgrades over the past several years, and Everest remains one of the most popular and useful text editors on the market.

If you use Everest regularly, register it via Joe Connor's Interactive Shareware Registration Scheme. You can reach Joe at: [jconnor@cix.compulink.co.uk](mailto:jconnor@cix.compulink.co.uk)

### **Inlet with no Outlet**

Dear CN Tech Dept:

I have been unable to get into my Megafile 20 hard disk drive since the day I installed a bad Accessory. I have been trying for nearly week to get back into it. I am not on-line anywhere, there's no User Group anywhere near me, and none of the other computer people up here have any idea how to fix my problem.

I have re-booted the system 50 or more times, tried to run different hard disk repair programs and so on, without any results. Is there anything I can do to get back into my

old Megafile?

Walter Deutsch, Henvey Inlet, Ontario,  
Canada.

**CN:** (we already sent the following answer to Mr. Deutsch via regular mail). Yes Walter, there is a solution, and it's easy to implement.

Step 1 – turn everything off.

Step 2 – find your original Atari ST Language disk or another floppy disk containing the Atari Hard Drive Utilities. You need to find a file called 'AHD1.PR' (the Atari Hard Drive Utilities are also available from several disk libraries and I believe your original letter stated you deal periodically with the Toronto Atari Federation 16/32-Bit Library).

Step 3 – insert the floppy disk containing AHD1.PR into your 'A' drive. Make sure the disk is Write Protected (Tab should be open).

Step 4 – boot your 1040 STfm. Do NOT turn on your Hard Drive. Boot the computer ONLY. Of course your monitor should also be switched on.

Step 5 – open the drive 'A' icon and locate AHD1.PR.

Step 6 – turn on your Megafile 20 and wait approximately 20 seconds for it to spin all the way up to speed (until all the ticking noises from the stepper motor have stopped).

Step 7 – double click on AHD1.PR. It will run, search the ACSI port for active devices, detect your hard drive, and exit.

Step 8 – click ONCE on the drive 'A' icon. Go to the Options menu and click on 'Install Drive'. In the subsequent dialog box type in a capital 'C' as the drive letter and the words Hard Disk for the name or label. Click on OK and return to the desktop. A drive 'C' icon will now be sitting on your desktop.

Step 9 – double click on the newly created 'C' icon. The contents of the 'C' partition on your hard drive will appear in a normal window, allowing you to delete or disable the offending Accessory.

That's it! Reboot normally and you'll have your hard drive back, in proper order. What you've done by following this procedure is to force TOS to recognize the hard drive and its contents without going through the

bootup sequence, thereby avoiding the offending accessory.

We also suggest that, whenever possible, you should really test new Accessories from a floppy bootup rather than a hard drive bootup. Make a boot floppy by creating an auto folder on a blank diskette and copying over the current contents of the Auto Folder on your hard drive (you may also have to copy over an ASSIGN.SYS file and a GEMSYS folder to your boot diskette to accommodate such things as NVDI or SpeedoGDOS). Copy the accessories you use to the root directory of the new boot diskette as well. Thereafter, any time you wish to try a new accessory, simply copy it to the test diskette and reboot without your hard drive. It will prevent a lot of headaches!

### **All I Want To Do Is FAX!**

Dear Current Notes:

I own a TT 4/16, connected to a Moniterm, a 1.06GB Quantum hard drive, and a US Robotics Sportster 14,400 Fax/Modem. The problem with my system is that I cannot seem to Fax anything using STraight Fax v2.2. I believe I've tried every setting possible in the STraight Fax configuration menus and dialogs. I've also tried fiddling with the NVRAM settings in my modem. Nothing seems to help and I keep getting some error message about my modem being off-line or disconnected.

I cannot return the modem (I've had it for nearly 2 years), and I've been unable to get any answer from any of the on-line support groups and BBS forums. Why does a supposed Group II modem not work; I have set and reset the Class 2 setting, to no avail. I also use STalker regularly with this modem without any problems.

Can you help?

Marianne Kantor, Chicago IL.

**CN:** We certainly can, Marianne. The problem you're encountering results from the fact that you've confused the term 'Group' with the term 'Class'. They're not interchangeable and refer to two related but different things about fax transmissions and formats. If you go into the 'Modem' item in the

'Preferences' menu in v2.2, you'll see the very first setting is for the Class of Modem you own. Your Sportster uses the Class 1 setting. Change the setting, save the Preferences, reboot, and you'll be all set to Fax yourself into exhaustion.

Another reason STraight Fax isn't working for you may be the result of a minor problem caused by STalker, which doesn't always hand the serial port back to the operating system properly. There is a Backtalk script floating around (it might even have been supplied with your original copy of STalker) called PORT\_FIX.BTK. If you run this script (it only takes a split second to do its work) just before you quit STalker, the serial port will be reset and ready for use by other telecommunications software. We use STalker at Current Notes and we've got the PORT\_FIX script permanently installed in the BackTalk menu; we always click it before exiting STalker.

### **My Fingers Do The Walking But I Can't Get Where I'm Going!**

Current Notes Magazine Letters to the Editor:

I am the proud owner of a D.E.K.A. external keyboard adaptor. I managed to install it properly (I've got an Atari Falcon), and the keyboard I'm using does work. However, the Caps Lock Indicator on the keyboard does not light up and keyboard combinations using the 'Right-Shift + ?' and 'Right-Control + ?' don't want to work.

I've checked and re-checked the installation and everything has been installed according to the manual. I purchased the D.E.K.A. as a used item at a Jumble Sale, so I've not yet steeled myself for an overseas phone call to Wizztronics.

I know that Current Notes reviewed the chro\_Magic Keyboard Gizmo a while ago and I was wondering if you could help solve my problem. I should also mention that the first week I owned the D.E.K.A, I was using an older PC keyboard which had been loaned to me by a friend. The problems arose when I purchased a new keyboard of my own. Repeated tests at the dealer from whom I purchased the keyboard indicated that the keyboard was in perfect working condition. I hope you can help, and I hope there's nothing wrong with the D.E.K.A. - the cost of

shipping to the US is quite high. There is no one in Europe who can service the D.E.K.A. Willy Niedermayer, Cologne Germany.

**CN:** The problem with your D.E.K.A. is that you've hooked up an AT keyboard instead of an XT keyboard. XT keyboards are a somewhat older standard and get along almost perfectly with the D.E.K.A.

Some AT keyboards will benefit from a jumper change inside the D.E.K.A. (read the D.E.K.A. Manual instructions for the different setting suggestions). The best thing to do however, is to find a good quality switchable XT/AT keyboard such as the Keytronic Model #E03601QL or its equivalent from another manufacturer. Using an XT model or one of the switchable models will activate the use of the Caps Lock light built into every PC keyboard. The Keytronic model we've suggested will also provide you with a superb keyboard at which you may spend hours and hours typing.

### **We'd Like To Believe It**

Dear Editor:

I would like to hook up my VGA monitor to a older 1040 STfm. I have been told about home-made adaptor cables which will get the job done. Where can I get hold of such cables and are they hard to hook up?

Mark Wheelwright, Savannah GA.

**CN:** We have heard that such cables exist. However, we have never actually seen one! So we don't really BELIEVE that such cables exist. The vast majority of VGA monitors cannot handle the type of signal that comes out of the monitor port of an ST, in any case. If you want VGA resolutions, buy a TT, a Falcon or a Mega STe (with a video card). The new Panther cable is also designed to connect an ST/STe to standard VGA cards. Call Computer Direct, STEve's B&C or TOAD. Otherwise, you're out of luck.▲

Send questions, answers, suggestions and comments to: Current Notes Magazine, 46 Scotia Ave, Toronto ON Canada, M1L 4E6, or e-mail us at: [hearson@io.org](mailto:hearson@io.org) or [hanne@io.org](mailto:hanne@io.org).

G:\7UP\_231E\CLASIFFI.EDS  
F:1 S:1 Z:1 S:1 L:8 Tab:5 U:73 B1k:8

**Advertise It Here!**

# **classified ads . . .**

**deals! bargains! fast sales! rare items! info!**

**SOFTWARE FOR SALE:** Phasar 4.1 Accounting package, NeoDesk CLI, NeoDesk 4, Data Diet 2, Squish II. Original disks and manuals. Whole bunch \$50 US + \$10 shipping anywhere. Call George at 416-427-7599 or send e-mail: hcarson@io.org

**MEMBERSHIP** in the Toronto Atari Federation is only \$35 per year. Benefits include a full subscription to the Phoenix Newsletter, admission to all regular, monthly meetings, 16/32 Library discounts, Seminar and Workshop discounts, full TAF Online BBS access (local message and file areas, as well as Atarinet, Fidonet & comp.sys.atari). CALL-TAF for more info at (416) 225-5823 and leave a message. We'll be happy to send you a brochure! You may also send a check made out to 'Toronto Atari Federation': TAF, 5334 Yonge St. Suite 1527, Willowdale ON, Canada, M2N 6M2. Superb Atari/TOS/GEM support.

**WEB PAGE DESIGN:** Complete authoring for business or private sites/pages. Banner and Logo design included in all contracts. Reasonable rates. We can even set up a site on the server of your choice! E-Mail to Planetary Dynamics at: lianne@io.org

**Current Notes cannot verify the accuracy of these classifieds. Buy and sell at your own risk. Maintain a written record of all transactions.**

**PLACE YOUR AD HERE:** A classified ad in Current Notes gets results! We accept ads for anything related to computing, telecommunications, and other items of interest to TOS/GEM users. Contact R. Boardman at (416) 693-9679 or via e-mail at: redfrog@io.org. Place an 8 line ad like this for only \$15US/\$20 Cdn! Send your ad copy with payment to: Current Notes, 46 Scotia Ave. Scarborough ON, Canada, M1L 4E6

Hands On Communication specializes in magazine and educational book design and publication. If you are teaching courses at high school, college or university and write your own student guides or lab manuals, let us show you how to turn your writing time into money-making time. We can accept electronic documents in most Atari and DOS/Windows formats, speeding delivery to you or your bookstore. We also do newsletters. Contact Hands On Communication, 46 Scotia Ave, Scarborough ON M1L 4E6. On the Internet daily: redfrog@io.org. Visit our Web site: <http://www.io.org/~redfrog/redfrog.htm>.

## **Next Issue in CN!!**

- \*PIMs - Harlekin!**
- \*Outline Art 3!**
- \*MagiC!**
- \*MinT/MultiTOS!**
- \*Fancy Falcon Games!**
- \*Telecom secrets!**
- \*SuzyB's Huge CD set!**
- \*Dan's CDs! \*Bird of Prey CD review!**
- \*Apex Media review!**
- \*Fonty review!**
- \*Much, Much, More!**



### Current Notes Advertisers

ABC Solutions	56
Anodyne Software	42
Branch Always Software	obc
Computer Direct	ifc, 1-3
Computer Dungeon	4
chro_Magic	36, 42
Esquimalt Digital Logic	32
Gribnif	27
HOMA Systems House	43
MGI Software Corp	33
Systems for Tomorrow	21
Toad Computers	28-29, ibc
Toronto Atari Federation	45

# CURRENT NOTES

**U.S. SUBSCRIPTIONS: 1 year-\$25 US funds 2 years-\$46 US funds**

**Canada SUBSCRIPTIONS: 1 year-\$35 Cdn 2 years-\$65 Cdn**

**Foreign SUBSCRIPTIONS: 1 YEAR-\$48 US 2 YEARS-\$90 US**

**U.S. & CANADA - PAY BY CHECK, BANK DRAFT OR MONEY ORDER**

**FOREIGN - PAY BY BANK DRAFT OR MONEY ORDER**

## everything

talk to us via e-mail:

**redfrog@io.org**

**hcarson@io.org**

## subscription

**EDITOR:**

**hcarson@io.org**

**NEWS & INFO:**

**d.dreibelbis@genie.com**

**LETTERS:**

**lianne@io.org**

**PUBLISHER:**

**redfrog@io.org**

SEND ALL SUBSCRIPTION REQUESTS TO:

*Current Notes*

*46 Scotia Ave.*

*Scarborough, ON*

*Canada*

*MIL 4E6*

## support

**MAKE ALL PAYMENTS OUT TO: 'CURRENT NOTES'**  
**PAYMENT MUST ACCOMPANY ALL SUBSCRIPTIONS**

*Please allow 4 to 6 weeks for processing!*

# Current Notes

Technical Support

Service - Repairs

Training

Consulting

## ABC solutions

**3 Groves Lane, Ajax Canada, L1S 3C7**

**SARA CD-ROM drivers for Groliers Encyclopedia  
and a dozen other popular CD-ROMs**

**First Word Plus**

**tbxCAD First Graph**

**Call: (905) 427-7599 FAX: (905) 427-9703**



# The Future of Atari Computing is at TOAD!

## NVDI 4 Screen Accelerator & GDOS Replacement

- Dynamically load fonts as needed
- Group fonts hierarchically in folders
- Print font lists automatically
- More color printing support
- "Font Preview" Accessory included
- Optional Type One Font Support

NVDI 4 (ST,TT, Falcon)	.....\$89.95
NVDI 4 for MagiCMac	.....\$99.95
NVDI 4 for ET4000	.....\$99.95
NVDI 4 PS Type-One Module	.....\$34.95
NVDI 3 to 4 Upgrade	.....\$30.00
NVDI 2.x to 4 Upgrade	.....\$50.00

## MagiC 4 Replacement Operating System

MagiC 4 is a SOFTWARE replacement for TOS that MULTITASKS FAST! Even do tough operations like formatting a floppy disk in the background with no slowdown! Optimized to take advantage of the ST/TT/Falcon DMA capabilities. Up to 16 Programs (or 10 programs with 6 accessories) may be preemptively multitasked. Up to 64 windows may be open simultaneously. Compatible with most software and runs most programs faster than TOS!

- NOW! Falcon Compatible!
- Compact! Fits on two 720K disks!

MagiC 4 (ST,TT, Falcon)	.....\$99.95
MagiC 2 to 4 Upgrade	.....\$59.00

BECOME A MAGICIAN!

## HD Driver

### Hard Disk Driver Software

HD Driver, new from Germany, is an optimized hard disk driver for the ST,TT, and Falcon. Replaces your AHD1 or ICD driver. Provides faster transfer speed, easier partitioning, and more!

- Compatible with More SCSI Devices
- Reads and Writes DOS Media
- Recommended for Digital Recording
- Boot from Any Partition
- CPX and ACC Configuration Programs

- Works with SyQuest & ZIP Drives
  - Support for 2 IDE Devices
  - Faster Reading and Writing
  - Fully AHD1 Compatible
- HD Driver (Latest Version) ....\$39.95

## Outside

### Virtual Memory Software

- Add Virtual Memory to any 68030 Atari
- New Version! Even More Compatible!

- Add Up to 512MB of Additional RAM
- Outside (Latest Version) ....\$59.95

## MagiCMac PPC



Run Atari software on the Macintosh! Now runs on Power-PC based Macs too! YES! You can run your favorite GEM-based Atari programs on any 68030, 68040 or Power-PC based Macintosh!

MagiCMac PPC + Ease .....\$219.00  
Contact us for a FREE DEMO VERSION!

## EASE 4

EASE 4 is the ultimate replacement desktop for your ST,TT, or Falcon. Works perfectly with or without MagiC 4. Color icons, desktop memos, hotlists, and much more.

EASE 4 (ST,TT, Falcon)	.....\$69.95
EASE 2 to 4 Upgrade	.....\$30.00

## PANTHER-VGA

Add an ET-4000 ISA graphics card to your 68000 Atari. Get 24-bit color! It's COOL!

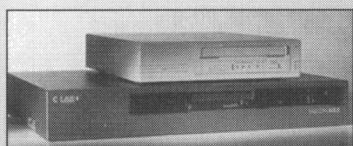
Panther Card (ST,TT, Falcon) ...\$189.95

## HOT STUFF!

MagiCPC (NEW!)	.....Call
BlowUp F/X Card (Falcon)	.....\$249.00
Kobold (ST,TT, Falcon)	.....\$69.95
Wacom Tablet Driver	.....\$79.00
Positive Image	.....\$99.00

OFFICIAL DISTRIBUTOR

## Falcon MK-X Arrives!



These machines are one hot item! C-LAB has taken the Falcon030 to a new level with the C-LAB Falcon MK-X. 'X' is for eXpandable! Includes a detachable, PC-compatible or Atari keyboard, room for two internal 3.5" drives, and a sleek new desktop case with room for internal expansions like the BlowUP FX, Afterburner 040, and FDI Digital Interface. Same ports and plugs as standard Falcon030 and 100% compatible. Call about other MK-I, MK-II, and MK-X configurations!

Falcon MK-I (Standard Falcon030, 4MB, No HD)	.....\$999.00
Falcon MK-X (Expandable Case, 4MB, No HD)	.....\$1149.00
Falcon MK-II (4MB, 530MB Internal SCSI HD)	.....\$1299.00
Cubase Audio 16 (Bundled with Falcon)	.....\$399.00
Math Coprocessor (68882, Installed)	.....\$59.00
14MB Upgrade (from a 4MB machine)	.....\$449.00
SCSI / IDE Internal / External Hard Disk Options	.....Call
MK-X Case Upgrade (For Existing Falcon Machines - Call)	.....\$399.00
SMP-II SMPTE Interface	.....\$749.00

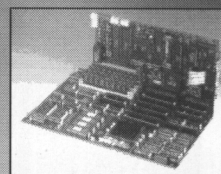
## NEW! HADES 68060!

### HADES: Incredible Speed

Toad Computers is pleased to bring you the new Hades Atari-Compatible from Switzerland's Medusa Computer Systems.

**Motherboard:** 4 PCI Slots, 2 ISA Slots, 1 VME Slot, Enhanced IDE Port, SCSI Port, Floppy Port, 2 Modem Ports, 1 LocalTalk Port, 1 Printer Port, MIDI Ports, TOS 3.06 (Slightly Modified), PC Keyboard Port, Mouse and Joystick Ports. **Toad Basic System Includes:** MC68040 32/64MHz Processor, 1.44MB Floppy Drive, PC Keyboard, Beetle Mouse, Full Size PC Tower Case, 1.3GB Enhanced IDE 3.5" 9ms Hard Disk, PCI 1MB DRAM ET4000 Graphics Card (up to 1280 x 1024), NVDI 4 for ET4000 Graphics Cards, Hard Disk Driver Software, 4MB RAM! **Call for more info and options!**

Hades 68040 System (Basic System)	.....\$2499.00
Optional MC68060 60MHz CPU	.....Add \$ 649.00
Optional MC68060 66MHz CPU (Fall '96)	.....Add \$ 749.00
Optional RAM, CD-ROM, etc.	.....Please Call



**TOAD COMPUTERS**  
570 RITCHIE HIGHWAY  
SEVERNA PARK, MD 21146-2925  
email: info@toad.net

(800) 448-8623  
(410) 544-6943 info  
(410) 544-1329 FAX  
http://www.toad.net



New Catalog Now Available! Call and Get Yours TODAY! 56 Pages of the Best Atari-Related Products!





# Gemulator 96

**The Atari ST/STE emulator for  
Windows computers and notebooks.  
Free demo now available on the Web!**

**Runs on  
Windows 3.1,  
Windows 95,  
and NT!**

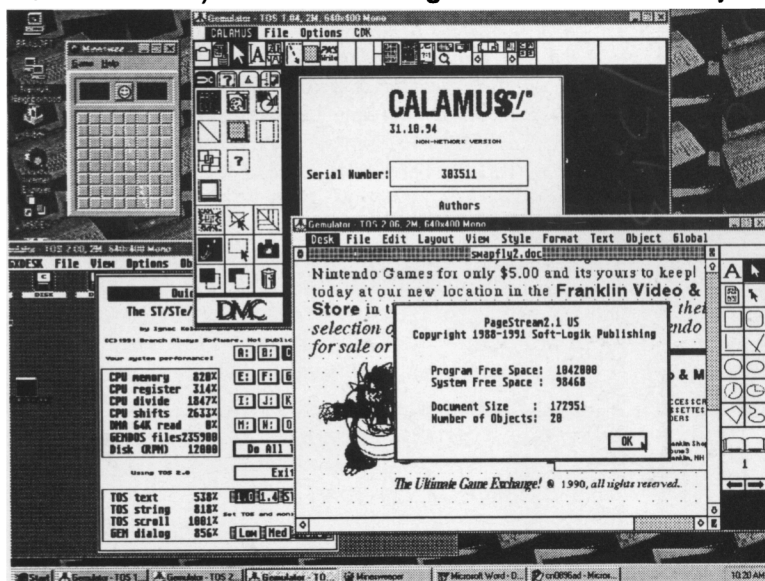
The best just got better. Gemulator 96 still runs your favorite Atari programs on Windows (including Calamus SL, Pagestream, GFA Basic, Word Writer, Flash!, Data Manager, DEGAS, Prism Paint, Laser C, to name a few), only **faster** than ever before, using **less memory** and **less disk space** than any other Atari ST emulator before. Gemulator 96 has the exclusive capability of running with either **TOS ROMs** or with the **MagiC** operating system (a TOS replacement from the makers of NVDI) making it ideal for all your Windows computers.

Here is how it works. Using the Gemulator ROM card, you can plug in one or more (up to 4) sets of Atari ST and STE TOS ROMs then plug the card into your PC. Or, you can install the MagiC operating system on your PC's hard disk. Or do both. When you run Gemulator 96, you can then choose to boot up any of these operating systems and even switch them on-the-fly.

**Don't be ripped off by slower more expensive emulators that try to imitate Gemulator. Only Gemulator 96 has these powerful features not found in *any* other Atari ST emulator:**

- ◆ Runs on all 386, 486, and Pentium computers with any version of Windows 3.1 or higher
- ◆ Supports all ST and STE TOS versions (TOS 1.0, 1.2, 1.4, 1.6, 1.62, 2.05, 2.06)
- ◆ Supports all versions of MagiC. Even runs MagiC three times faster than MagiC PC
- ◆ Plug in your 64K Magic Sac ROMs and run Magic Sac to run Macintosh software
- ◆ Full speed Atari ST emulation on a 486/33. Full TT speed on a Pentium/90
- ◆ Supports all Atari ST screen resolutions, plus higher Super VGA resolutions
- ◆ So small you can run it from floppy disk in as little as 6 megabytes of memory
- ◆ Gemulator 96 costs just **\$69.95**. MagiC and ROMs are available extra.

The Windows 95 screen shot below was taken on a 90 MHz Pentium computer which has TOS 2.06 and TOS 1.4 ROMs installed on the card as well MagiC installed on the hard disk. Each of the 3 Gemulator windows is running one of those operating systems and each is running a different Atari ST program (Calamus SL, Pagestream, and Quick Index 2.2). True **multitasking** of Atari software side-by-side with your DOS and Windows programs!



Gemulator 96 is available immediately from Branch Always Software and from participating Atari ST dealers worldwide.

<b>Gemulator 96 emulator</b>	<b>\$69.95</b>
MagiC for Gemulator	\$69.95
Gemulator ROM card	\$89.95
TOS ROMs	CALL
Macintosh ROMs	CALL

## Branch Always Software

A division of Emulators, Inc.

14150 N.E. 20th Street, Suite 302

Bellevue WA 98007 U.S.A.

Fax: 206-236-0257

Phone: 206-236-0540

email: [brasoft@emulators.com](mailto:brasoft@emulators.com)

**Write for a free product catalog or download the FREE Gemulator 96 demo from our web page:  
<http://www.emulators.com/brasoft/>**